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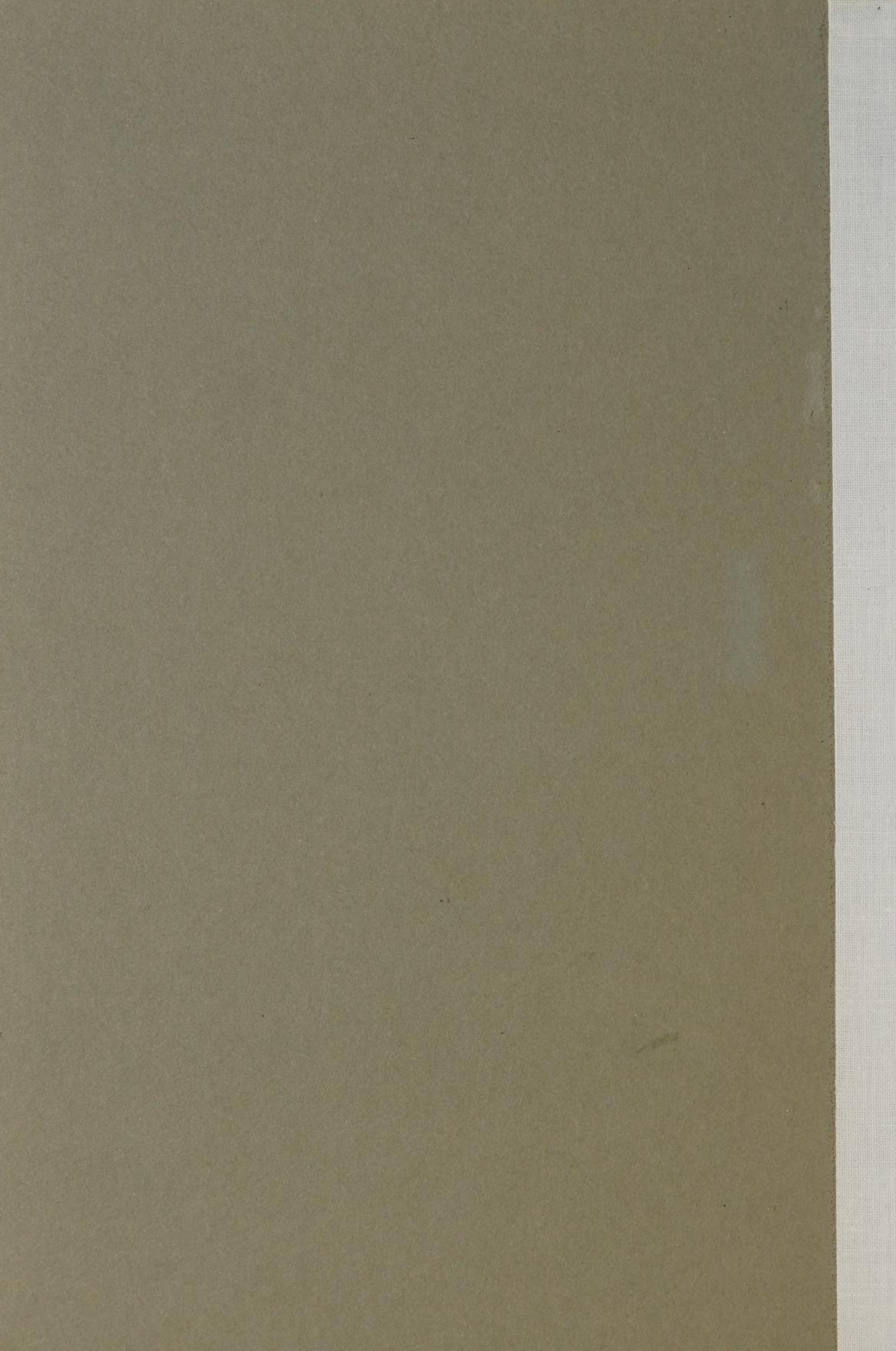
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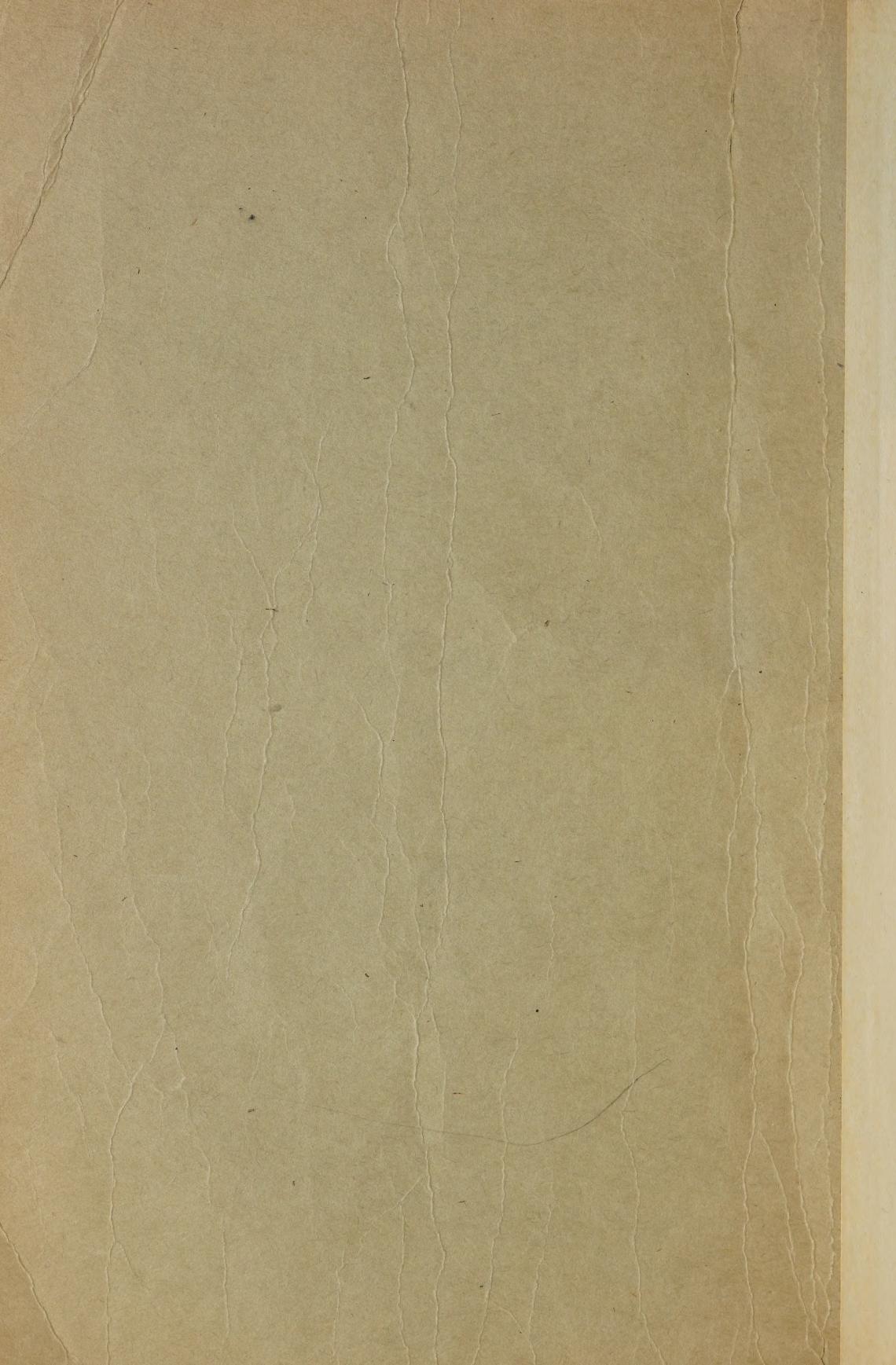
# THE MARITIME PROVINCES SINCE CONFEDERATION

A STATISTICAL STUDY OF  
THEIR SOCIAL AND ECONOMIC CONDITION  
DURING THE PAST SIXTY YEARS

PUBLISHED BY AUTHORITY OF THE HON. JAMES MALCOLM  
MINISTER OF TRADE AND COMMERCE



OTTAWA  
F. A. ACLAND  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
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STATISTICS  
OF CANADA  
1871-1881  
THE MARITIME PROVINCES

## LETTER OF TRANSMITTAL

To the Honourable James Malcolm, M.P.,  
Minister of Trade and Commerce,  
Ottawa, Canada.

SIR,—I have the honour to lay before you the accompanying memorandum on social and economic conditions in the Maritime Provinces since Confederation, prepared in the Dominion Bureau of Statistics, and recommended to be printed by the Royal Commission on Maritime Claims (see Report of Commission, paragraph 39, page 44). The object of the memorandum is to assist in the consideration of Maritime problems by providing a general background and the more important economic records of the past sixty years.

I have the honour to be,  
Sir,  
Your obedient servant,

R. H. COATS,

*Dominion Statistician*

DOMINION BUREAU OF STATISTICS,  
OTTAWA, June 1, 1927.



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# THE MARITIME PROVINCES SINCE CONFEDERATION

## CHAPTER I.—GENERAL DESCRIPTION—PHYSIOGRAPHY AND NATURAL RESOURCES

Of Canada's total area of 3,684,723 square miles, the Atlantic Maritime Provinces—Prince Edward Island, Nova Scotia and New Brunswick—comprise 51,597 square miles, or 1·40 per cent.

*Geographically* the Maritime Provinces form the larger part of the Acadian or Appalachian region of Canada; they possess several of the minerals (notably coal) which have made the Eastern States in the same geological area pre-eminent among mining and industrial communities.

The *fisheries* of the Maritime Provinces are too well known to require more than mention. The coasts of these provinces are the natural base for perhaps the most extensive and valuable fisheries in the world with the possible exception of those of the North Sea.

*Land Area.*—There is an abundance of fertile land suitable for general farming in all three provinces: of the total land area of 32,744,550 acres, twenty million acres are estimated to be suitable for farm purposes. Particulars of the land area, estimated possible farm land, farm land occupied, forest areas, etc., and population by provinces, with comparative figures for all Canada, are shown in the following statement:

Item	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada*
Area in acres.....	1,398	13,484	17,863	32,745	1,401,316
Arable land.....	1,258	8,092	10,718	20,068	358,162
Area occupied as farm land.....	1,216	4,724	4,270	10,210	140,888
Improved area in farms.....	767	992	1,368	3,127	70,770
Unimproved area in farms (chiefly wood- land and natural pasture).....	449	3,732	2,902	7,083	70,118
Land unoccupied (chiefly forest).....	42	3,368	6,448	9,858	217,274
Population, 1921.....	88	524	388	1,000	8,788

(See Census of Agriculture, 1921, pp. xi and xiv.)

\*Nine provinces only.

A brief description of the physical features of each of the provinces is appended:

*Prince Edward Island.*—This, the smallest province of the Dominion, lies at the south of the Gulf of St. Lawrence and is separated from the mainland of the continent by Northumberland strait. It is 150 miles in length and varies from 4 miles to 30 in width, covering an area of 2,184 square miles, some 200 square miles more than the state of Delaware and slightly more than half the area of the island of Jamaica in the British West Indies. Its rich red soil and red sandstone formation make up a distinctive and even topography, no point in the island attaining a greater altitude than 311 feet above sea level. A climate tempered by the surrounding waters of the gulf, and yet free from the rigours of the Atlantic storms, combined with numerous rivers, sheltered harbours and rolling plains, offers great inducements to the pursuit of agriculture and of fishing. The province is noted for its predominance in the fox-farming industry, its lobster canneries, and its production of oats and potatoes.

*Nova Scotia.*—The province of Nova Scotia is 386 miles in length by from 50 to 100 miles in width, a long and rather narrow strip of land lying parallel to the Maine and New Brunswick coast and joined to the latter by the isthmus of Chignecto. It includes at its north end the island of Cape Breton, which is separated from the mainland by the strait of Canso. The total area of the province is 21,428 square miles—a little over 2,000 square miles less than the combined area of Belgium and Holland, with which it may well be compared as to climate, natural resources and accessibility. Cape Breton Island, at the mouth of the gulf of St. Lawrence and sheltering Prince Edward Island from the Atlantic, is roughly 100 miles in length with an extreme breadth of 87 miles, its area of 3,120 square miles enclosing the salt-water lakes of Bras d'Or, connected with the sea at the north by two natural channels and at the south by the St. Peter's ship canal. The ridge of mountainous country running through the centre of the Nova Scotian mainland divides it roughly into two slopes, that facing the Atlantic being generally rocky and open to the sweep of Atlantic storms, while the other, facing the bay of Fundy and the gulf of St. Lawrence, consists for the most part of arable and fertile plains and river valleys, and is noted for its farming and fruit farming possibilities. The Atlantic coast is deeply indented with numerous excellent harbours.

*New Brunswick.*—With a total area of 27,985 square miles, New Brunswick may be compared to Scotland with its area of 30,405 square miles. The conformation of the province is also rather similar to that of Scotland, for the country, although not mountainous, is diversified by the occurrence of numerous low hills and valleys. While New Brunswick is essentially a part of the mainland, the bay of Chaleur at the north, the gulf of St. Lawrence and Northumberland strait at the east, the bay of Fundy at the south and Passamaquoddy bay at the southwest, provide the province with an extensive sea coast. Although larger in area than Nova Scotia, New Brunswick does not cover as many degrees of latitude, its most southern point being a little south of  $45^{\circ}$  north latitude and its most northern a little north of  $48^{\circ}$ , while Nova Scotia extends roughly from the 43rd to the 47th parallel. To its southwest is a group of islands belonging to the province, the most important of which are Grand Manan, Campobello and the West Isles. The soil of these islands, similar to much of that on the mainland, is generally fertile, but only a small proportion of it is under cultivation. New Brunswick has been well called the best watered country in the world; numerous rivers provide access to extensive lumbering areas in its interior and to many of the most attractive hunting and fishing resorts in the Dominion.

## CHAPTER II.—THE TREND OF MARITIME POPULATION, 1861-1921

*Introductory.*—Generally speaking, the trend of population, especially in a “new” country, is regarded as an index of its prosperity or the reverse. There are, of course, exceptions. In economically backward countries, an increasing population may be the cause and the symptom of increasing poverty, and in other exceptional cases the inhabitants may be prosperous at a time when the population is stationary or even decreasing. Illustrations of the latter condition may be found in France and perhaps in Prince Edward Island during recent years. Even in such cases, however, the absence of growth of population is significant. It may indicate that, under existing conditions, the country concerned has attained its “optimum” density of population, and that the standard of living can only be maintained by restricting the rate of natural increase or by the emigration of the young as they reach maturity. In any case, the movement of the population is a fact of fundamental importance. The following study of population tendencies in the Maritime Provinces since Confederation may therefore be regarded as illustrating and reflecting the course of their economic development, which is later described in more specific detail.

The increase or decrease of population depends upon two factors: (1) Natural increase, or the relation of births to deaths, and (2) the increase or decrease arising out of the relation of immigration to emigration. There are no comprehensive records under either of these headings back to Confederation, but the facts can be largely established from the results of the decennial census, and it is upon the latter that the present chapter is wholly based. The chapter begins by stating the main facts of population from 1861 to 1921. From these the immigration and emigration movements are deduced. The nature of these movements is then discussed. There follows a treatment of the results upon the character of the resident population of the Maritime Provinces, and the manner in which this character has itself influenced later trends.

*The Growth of Population, 1861 to 1921.*—The population growth of the Maritime Provinces in its general setting can be seen in the four summary tables presented herewith (Tables I-IV)\*. The central fact upon the most cursory view is that in the fifty years since Confederation the Maritimes have increased in population much less rapidly in every decade than any other province of Canada. One province, Prince Edward Island, has actually been declining in population since 1891.

This is not due to their failure to receive immigrants—for they have received a certain amount of immigration throughout the period. Nor is it due—at least in its initial stages—to failure of natural increase. It is due to the emigration of considerable numbers of native population as well as of immigrants whom they failed to retain. The demonstration of this is in the rest of this chapter.

TABLE I.—Population of Canada and its Provinces and Territories, 1871-1921.

Provinces.	1871	1881	1891	1901	1911	1921
CANADA.....	3,689,257	4,324,810	4,833,239	5,371,315	7,206,643	8,788,483
Alberta.....	—	—	—	73,022 (1)	374,295	588,454
British Columbia.....	36,247	49,459	98,173	178,657	392,480	524,582
Manitoba.....	25,228	62,260	152,506	255,211 (2)	461,394	610,118
New Brunswick.....	285,594	321,233	321,263	331,120	351,889	387,876
Nova Scotia.....	387,800	440,572	450,396	459,574	492,338	523,837
Ontario.....	1,620,851	1,926,922	2,114,321	2,182,947 (3)	2,527,292	2,933,662
P.E. Island.....	94,021	108,891	109,078	103,259	93,728	88,615
Quebec.....	1,191,516	1,359,027	1,488,535	1,648,898 (3)	2,005,776	2,361,199
Saskatchewan.....	—	—	—	91,279	492,432	757,510
Yukon.....	—	—	—	27,219	8,512	4,157
Northwest Territories.....	48,000	56,446	98,967 (2)	20,129 (3)	6,507	7,988
Canadian Navy.....	—	—	—	—	—	485

(1) As corrected by transfer of population of Fort Smith (368) to Northwest Territories.

(2) Represents population of area as after formation of Provinces of Saskatchewan and Alberta.

(3) As corrected by Extension of Boundaries Act, 1912.

TABLE II.—Per cent distribution of the population, 1871-1921.

Provinces	1871	1881	1891	1901	1911	1921
CANADA.....	100.00	100.00	100.00	100.00	100.00	100.00
Alberta.....	—	—	—	1.36	5.19	6.70
British Columbia.....	0.98	1.14	2.03	3.33	5.45	5.97
Manitoba.....	0.68	1.44	3.16	4.75	6.40	6.94
New Brunswick.....	7.74	7.43	6.65	6.16	4.88	4.41
Nova Scotia.....	10.51	10.19	9.32	8.56	6.83	5.96
Ontario.....	43.94	44.56	43.74	40.64	35.07	33.38
Prince Edward Island.....	2.55	2.52	2.25	1.92	1.30	1.01
Quebec.....	32.30	31.42	30.80	30.70	27.83	26.87
Saskatchewan.....	—	—	—	1.70	6.84	8.62
Yukon.....	—	—	—	0.51	0.12	0.05
Northwest Territories.....	1.30	1.30	2.05	0.37	0.09	0.09

Table III.—Numerical Increase in Population of Canada by Provinces and Territories, 1871-1921.

Provinces	Popul. in 1871	Increase by Decades—1871 to 1921					Popul. in 1921	Increase 1871 to 1921
		1871 to 1881	1881 to 1891	1891 to 1901	1901 to 1911	1911 to 1921		
CANADA.....	3,689,257	635,553	508,429	538,076	1,835,328	1,581,840	8,788,483	5,099,226
Alberta.....	—	—	—	73,022	301,273	214,150	588,454	588,454
British Columbia.....	36,247	13,212	48,714	80,484	213,823	132,102	524,582	488,335
Manitoba.....	25,228	37,032	90,246	102,705	206,183	148,724	610,118	584,890
New Brunswick.....	285,594	35,639	30	9,857	20,769	35,987	387,876	102,282
Nova Scotia.....	387,800	52,772	9,824	9,178	32,764	31,496	523,837	136,037
Ontario.....	1,620,851	306,071	187,399	68,626	344,345	406,370	2,933,662	1,312,811
P.E. Island.....	94,021	14,870	187	-5,819	-9,531	-5,113	88,615	-5,406
Quebec.....	1,191,516	167,511	129,508	160,363	356,878	355,423	2,361,199	1,189,683
Saskatchewan.....	—	—	—	91,279	401,153	265,078	757,510	757,510
Yukon.....	—	—	—	27,219	-18,707	-4,357	4,157	4,157
Northwest Territories.....	48,000	8,446	42,521	-78,838	-13,622	1,481	7,988	-40,012
Canadian Navy.....	—	—	—	—	—	485	485	485

TABLE IV.—Increase per cent of population by provinces, 1871 to 1921.

Provinces	Popul. in 1871	Per cent Increase by Decades					Per cent Increase in 50 years
		1871 to 1881	1881 to 1891	1891 to 1901	1901 to 1911	1911 to 1921	
CANADA.....	3,689,257	17.23	11.76	11.13	34.17	21.95	138.22
Alberta.....	—	—	—	—	412.58	57.22	—
British Columbia.....	36,247	36.45	98.49	81.98	119.68	33.66	1,347.24
Manitoba.....	25,228	146.79	144.95	67.34	80.79	32.23	2,318.42
New Brunswick.....	285,594	12.48	0.01	3.07	6.27	10.23	35.82
Nova Scotia.....	387,800	13.61	2.23	2.04	7.13	6.40	35.08
Ontario.....	1,620,851	18.88	9.73	3.25	15.77	16.08	80.99
P.E. Island.....	94,021	15.82	0.17	-5.33	-9.23	-5.46	-5.75
Quebec.....	1,191,516	14.06	9.53	-0.77	21.64	17.72	98.17
Saskatchewan.....	—	—	—	—	439.48	53.83	—
Yukon.....	—	—	—	—	-68.73	-51.16	—
Northwest Territories.....	48,000	17.60	75.33	-79.66	-67.67	22.76	-83.36

*Increase of the Native-Born.*—We may begin with a sketch of the native-born population in the Maritimes during the past six decades, especially significant as an index of prosperity—for the native knows the conditions in his home province, while the immigrant frequently comes because he has not been prosperous elsewhere.§ The facts, derived from the "birthplace" statistics of the Census, are set out in the following tables:—

TABLE V.—Native-born Population of the Maritime Provinces.

Census	Prince Edward Island	Nova Scotia	New Brunswick
1861.	63,027	298,192	199,445
1871.	80,271	358,560	248,879
1881.	99,397	412,859	290,165
1891.	102,680	424,081	299,257
1901.	99,006	435,172	313,178
1911.	91,154	456,063	333,576
1921.	86,250	480,332	366,418

TABLE VI.—Percentage Increase of the Native-Born Population

Decade	Prince Edward Island	Nova Scotia	New Brunswick
1861-1871.	27.3	20.2	24.8
1871-1881.	23.8	15.1	16.6
1881-1891.	3.3	2.7	3.1
1891-1901.	*3.6	2.6	4.6
1901-1911.	*7.9	4.8	6.5
1911-1921.	*5.4	5.3	9.9

\*Decrease.

The outstanding fact in these tables is that the growth of native population began to decline seriously in the seventies, and that it had all but ceased in the eighties, since when it has only slightly recovered. To expand the statement somewhat: the growth of the Maritimes in native population during the decade 1861-71 was still extraordinarily rapid—as rapid, in fact, as that which has recently marked the prairie provinces and Quebec. Even at that time, as we shall see below, a certain number were leaving to seek their fortunes elsewhere, but the population was young, vigorous and rural; it was an age of large families, and the native-born population grew despite a moderate amount of emigration.

During the seventies, the native increase was but two-thirds as great as in the preceding decade. The cause was obviously emigration, as may be seen from later evidence. It therefore appears that the conditions which have recently come into general notice really began during the seventies. The Franco-Prussian war had just ended, leaving depression in its wake; there was reaction from a long period of inflation; reciprocity between Canada and the United States had been terminated; and the wooden ship of the Maritimes was being ousted by the steel. The depression which lasted from 1873 to 1896 was not limited to the Maritime Provinces nor indeed to Canada; but it was in this period and especially in its closing years that the most severe loss of population experienced in the Maritime Provinces occurred. Another factor which must not be overlooked is the fall in the general birth rate which set in during the eighties and which will be specially mentioned later on.

Business conditions in general began to improve about 1896, when investment and development once more became considerable. During the period 1901-1911 the gain of native-born population from the Maritime Provinces became greater, and Nova Scotia obtained a share of the new immigration which was coming to Canada. War conditions hindered emigration between

§It should be noted that increases in native-born population in an area which is attracting immigrants are partly due to the replacement in the Census of immigrant parents by native-born children. In such an area the percentage of increase in the native-born population will be greater than the natural increase.

1911 and 1921, and the loss of population by emigration, war, and the influenza epidemic combined was less than that due to emigration alone in any previous decade since 1881. A large number of immigrants came into Nova Scotia and New Brunswick during the years preceding the war, and many of them were still in these provinces in 1921. Only Prince Edward Island, the most typically rural of the three provinces, continued to lose population more rapidly than it could be replaced by natural increase or immigration during the decade 1911-1921.

Since 1921, only estimates are available as to the trend of Maritime population, but the depression which has prevailed elsewhere for most of the period is of the kind which would be severelt felt in such a community. The statistics of school attendance, however, used as a measure of population in general, indicate a slight initial growth, being as follows: 1921, 200,705; 1922, 210,326; 1923, 210,953; 1924, 208,140; 1925, 209,924.††

We may now proceed to the definite measurement of the emigration which has taken place from the Maritime Provinces and of its character:

*Emigration from the Maritime Provinces, 1861-1921.*—A general measure of the volume and character of the emigration from the Maritime Provinces may be obtained by a study of the age and sex distributions of the population at different dates as disclosed by the census. For example: in 1881 there were enumerated in the three Maritime Provinces 48,147 females aged 15-19. Ten years later the number of females 25-29 was only 32,574. It follows that the remaining 15,573 must have died or left the Maritimes\*. From a life table constructed for the state of Massachusetts of date 1890, it may be estimated that the deaths in this group of 48,147 over a period of ten years were 3,653 in number. This leaves the net emigration as 11,029. The gross emigration was of course larger than this, for at least a certain number of immigrants came into the Maritimes from other countries and other parts of Canada during the period.

The results of a calculation made by the method above described§ are given in the accompanying tables. Table VII, with addenda, provides an estimate of the absolute amount of emigration in different age and sex groups from 1861 to 1921. In Table VIII, the same material has been worked into a percentage form giving the relative loss of population from each group during the same period.† The tables show that gross emigration from the Maritimes in the eighties amounted to 103,785; in the nineties to 111,197; in 1901-1911 to 98,598; and in 1911-1921 to 92,537. In the past fifty years it has reached, say, 450,000. The rate increased from 1861 until the nineties, after which it showed a slight decline. There was an appreciable amount of emigration of the native born even in the sixties, although it did not become large until late in the seventies.\*\*

In proceeding to an examination of the tables, the first point to note is that emigration from the Maritime Provinces, though not confined to any one age, is most common between the ages of 15 and 19, (emigration of children under 10 almost certainly points to the departure of whole families), and that for some thirty years (1881-1911) the Maritime Provinces continued to lose by emigration in each decade about 28 per cent of the young people between 15 and 25 years of age at the beginning of the decade. The existence of considerable emigration at this period of life is not necessarily a sign of an unsound economic condition, for it is natural for the young to seek new fields and better opportunities. There is a considerable amount of such emigration from Ontario and Quebec. The emigration of older people, or of entire families, is more significant. The latter type of migration shows the greatest fluctuations, but appears to have been somewhat less common after 1901. In the decade 1911-1921 the effects of emigra-

††Compare this record with that of employment on pages 35, 37-38.

\*This assumes, of course, that ages were correctly stated in both censuses. But even if a few misstated their ages, they would be enumerated in other groups, so that the extension of the method to all ages automatically compensates for errors in statement of age.

§It may be added that in estimating the number of deaths, in the subjoined calculations, three life tables were used: deaths, 1861-1891, were estimated from Massachusetts life tables, 1890 (U.S. life tables pp. 132, 138); deaths, 1891-1901, were estimated from life tables for the original registration states 1901 (ibid. 53, 56, 60); and deaths 1901-1921 were estimated from life tables for the original registration states 1910 (ibid. 54, 58, 62). Thus allowance was made for the improvement in expectation of life which has been brought about by improved sanitation, medical science, etc., during the past generation.

† Gross loss has not been calculated as a percentage, as the ages of the immigrants taking the places of native-born emigrants in the census is unknown.

\*\* Tables have been prepared to show the estimated emigration from each of the three provinces; these tables may be obtained from the Dominion Bureau of Statistics.

tion are not so easy to isolate, since part of the loss of population was due to deaths in war, the Halifax disaster, and the influenza epidemic of 1918. The enlistment of many young men in the army would tend to retard emigration among the remainder; an epidemic or a catastrophe would have similar results. It is likely then that the loss of population due to special wartime causes was not any larger than would have taken place as a result of emigration alone if there had been no war. However this may be, the loss of population between 1911-1921 due to emigration, war, disaster, and epidemic combined appears to have been less than the loss of population due to emigration alone in any of the three preceding decades.

TABLE VII.—Net emigration from the Maritime Provinces in each sex and age group for the four decades 1881-1921.

(Exclusive of deaths except during 1911-1921, when the deaths from war, influenza, and the Halifax explosion are included with the losses by emigration.)

Age at beginning of decade	1881-91		1891-1901		1901-11		1911-21	
	Males	Females	Males	Females	Males	Females	Males	Females
5-9.....	4,412	3,995	3,378	4,159	2,256	2,614	2,556	2,183
10-14.....	9,269	6,179	9,149	8,177	8,511	6,207	8,534	5,398
15-19.....	13,875	11,920	14,042	13,419	13,275	12,032	10,799	9,539
20-24.....	11,735	12,629	12,062	12,627	9,769	10,726	8,287	9,027
25-29.....	5,713	6,849	4,520	6,074	2,462	3,888	1,363	2,687
30-34.....	1,665	2,260	1,364	2,309	107	1,532	434	974
35-39.....	1,201	2,170	581	1,390	158*	1,124	385*	1,081
40-44.....	194	601	455	1,168	216*	837	1,054*	351
5-44.....	48,064	46,603	45,551	48,323	36,006	38,960	30,534	31,240
Total.....	94,667		93,874		74,966		61,774	

\* Increase.

NOTE.—From the above, gross emigration may be calculated for each decade, as follows:\*

Net emigration 1881-1891.....	94,667
Immigrants who came 1881-1891 and were still living in 1901, from 1901 census, 7,804.	
†Estimated number living in 1891, 100-85-59 of same.....	9,118
Gross emigration 1881-1891 exceeding.....	103,785
Net emigration, 1891-1901.....	93,874
Immigrants who came 1891-1901 and were still living in Maritimes in 1901, from 1901 census.....	17,323
Gross emigration 1891-1901 exceeding.....	111,197
Net emigration, 1901-1911.....	74,966
Immigrants who came 1900-1910 and were still living in Maritimes in 1921, from 1921 Census, 20,227.	
†Estimated number living there in 1911, 100-85-59 of same.....	23,632
Gross emigration, 1911-21 exceeding.....	98,598
Net emigration, 1911-1921 (including some deaths).....	61,774
Immigrants who arrived 1911-1921 (1921 Census).....	30,763
Gross emigration 1911-21 (including war, influenza and explosion deaths) exceeding.....	92,537

\*All figures in these calculations are *minimum* estimates, as the census yields no information concerning the movements of persons born after one census who have left the country before the next one, or immigrants who have come into the country after one census who have left it again before the next one.

†Deaths in this group probably overestimated.

## Addenda to Table VII

A. Net emigration from Nova Scotia in each sex and age group for the period 1861-1881. Exclusive of deaths, which have been separately calculated on the basis of Massachusetts life tables for 1890.†

Age at beginning of decade	1861-1871		1871-1881	
	Males	Females	Males	Females
5- 9	657	gain 376	1,006	476
10-14	1,873	gain 562	1,958	386
15-19	2,770	1,704	2,782	2,702
20-24	3,528	4,381	3,829	4,263
25-29			1,561	2,245
30-34	gain 202	813	485	1,060
35-39			gain 736	gain 261
40-44	gain 557	gain 325	gain 383	gain 704
45-49			loss 547	loss 410
50-54			gain 1,013	gain 498
55-59			gain 747	gain 425
60-64			gain 525	gain 661

†Note, in this table, the apparent gain in population at ages over 35 (except in the group 45-49). These seeming anomalies may be due to mis-statement of ages as explained above. On account of the evidence of such mis-statements, the general tables have not been carried beyond age 45, after which age it is not likely that much emigration occurs.

B. Net emigration from New Brunswick in each sex and age group for the period 1861-1871 (deaths excluded)

Age at beginning of decade	1861-1871	
	Males	Females
6-16	2,384	gain 27
16-21	2,989	3,205
21-40	3,723	4,176
40-50	406	494

C. Net emigration from New Brunswick in each sex and age group for the period 1871-81 (deaths excluded).

Age at beginning of decade	1871-1881	
	Males	Females
5- 9	526	384
10-14	2,086	513
15-19	2,514	2,583
20-24	3,068	3,746
25-29	1,160	1,682
30-34	gain 16	292
35-39	gain 37	157
40-44	gain 126	gain 222
45-49	431	454
50-54	gain 664	gain 182
55-59	gain 202	24
60-64	gain 205	gain 166

NOTE.—For Prince Edward Island it was impossible to construct similar detailed estimates, as the pre-Confederation census of 1871 gives ages only in the broad groups under 5, 5-16, 16-21, 21-45, 45-60, over 60. In the age group 16-21, it is estimated that 1,108 males and 1,543 females left the province between 1871 and 1881.

TABLE VIII.—Net emigration from the Maritime Provinces during each decade as a percentage of the numbers in the initial group from which it was drawn, 1881-1921.

(War deaths included 1911-21; all other deaths excluded).

Age at beginning of decade	1881-1891		1891-1901		1901-1911		1911-1921	
	Males	Females	Males	Females	Males	Females	Males	Females
5-9	7.74	7.28	6.05	7.74	4.23	5.07	4.73	4.12
10-14	17.09	12.14	16.84	15.95	16.44	12.69	16.63	10.97
15-19	28.20	24.76	28.09	27.81	26.21	25.12	21.76	20.03
20-24	28.47	29.73	28.81	30.28	22.79	26.18	20.01	21.95
25-29	17.88	20.69	14.37	18.65	7.48	12.14	3.91	7.97
30-34	6.49	8.57	5.30	8.82	0.40	5.85	1.42	3.48
35-39	5.13	9.09	2.51	6.02	0.64*	4.69	1.37*	4.14
40-44	0.95	2.97	2.14	5.47	0.98*	3.86	4.34*	1.54
45-49	10.92	11.84	8.61	6.48	6.75	7.96	5.06	6.99
50-54	16.05*	3.06*	9.71*	0.48*	10.05*	4.93*	6.28*	0.79
55-59	12.08*	1.32*	13.95*	6.43*	10.07*	5.82*	12.46*	5.20*
60-64	12.39*	1.56	3.42	2.43	3.73	0.85*	2.66	1.94*

\*Gain or increase; much of this seeming gain is probably due to understatement of age as explained above.

*Addenda to Table VIII.*

A. Net emigration from Nova Scotia, 1861-1881, as a percentage of the numbers in the initial groups from which it was drawn.

Age at beginning of decade	1861-1871		1871-1881	
	Males	Females	Males	Females
5-9	3.00	1.75*	3.81	1.85
10-14	8.76	2.78*	8.22	1.69
15-19	14.24	8.74	13.75	12.99
20-24	12.60	14.53	20.93	21.76
25-29			10.30	13.76
30-34	1.16*	4.37	3.96	8.18
35-39			7.69*	2.58*
40-44	4.32*	2.49*	4.81*	8.72*
45-49			7.13	5.33
50-54	-	-	15.45*	7.49*
55-59	-	-	15.46*	8.65*
60-64	-	-	13.09*	18.84*

\*Increase.

B. Net emigration from New Brunswick, 1861-1881, as a percentage of the numbers in the initial groups from which it was drawn.

Age at beginning of decade	1861-1871		Age at beginning of decade	1871-1881	
	Males	Females		Males	Females
6-16	7.19	0.09*	5-9	2.59	1.99
16-21	21.10	21.73	10-14	11.29	2.94
21-40	11.09	13.00	15-19	16.06	16.26
40-50	3.78	5.27	20-24	21.89	25.76
			25-29	10.83	15.11
			30-34	0.19*	3.46
			35-39	0.50*	2.17
			40-44	2.00*	3.73*
			45-49	7.70	8.69
			50-54	14.07*	4.36*
			55-59	5.17*	0.71
			60-64	6.61*	6.63*

\*Increase.

NOTE.—In Prince Edward Island, out of the group 16-21 in 1871, 19.67% of the males and 24.36% of the females emigrated during 1871-1881 (net emigration).

While the Maritimes have lost by emigration in each age group under 50, over 50 there is evidence that the population has been increased by immigration—probably by the return of former residents to their former home. The latter explanation is supported by the fact that such increase of population at the older ages is more common among men than women—as should be expected, since the women who leave the Maritimes probably marry elsewhere. A special peculiarity is noticeable in the age group 45-49, where there appears to be an excessive amount of emigration. The explanation probably is that the number of persons in this group is understated, the age of 45 being a threshold which many of both sexes seem reluctant to cross. Another result of this inaccuracy is that the group of persons between 40 and 44 is always larger than we should expect. Thus it appears from many of the tables as if the population of the Maritimes were being swelled by the arrival of immigrants in their early forties, whereas it is probable that the returning tide (of persons who have done fairly well elsewhere and who return to spend their later years) does not become very great until the fifties. Minor irregularities at the higher ages may be due to the smaller numbers involved, or to differences between the mortality rates employed in the calculation and those of the Maritime Provinces. It will also be noticed from this table that under the age of twenty, males emigrate in greater numbers than females, while above the age of twenty, females emigrate in greater number than males. (By "emigration" is here meant departure to any place outside of the Maritime Provinces, including other parts of Canada).

One of the minor points of interest emerging from this table is the light which it seems to throw on the increasing mobility of women. The loss of women by emigration was small before 1880, and it did not occur except in the later ages. Since then, there is a manifest tendency toward greater freedom of movement on the part of women and toward emigration at earlier ages, although even yet male emigration is on a larger scale than female under the age of twenty.

\* \* \*

At this point it should be emphasized that notwithstanding that, in each of the past four decades, the Maritime Provinces have seen an emigration of some 100,000 population, the gross population has continued to increase. The basic figures are restated in the following:

TABLE IX.—Increase in Maritime population compared with estimated gross emigration.

Decade	Population of Maritimes		Increase of population	Estimated gross emigration exceeds
	at begin- ning	at end		
1861-1871.....	663,761	767,415	103,654	30,000
1871-1881.....	767,415	870,696	103,281	40,000
1881-1891.....	870,696	880,737	10,041	103,000
1891-1901.....	880,737	893,953	13,216	111,000
1901-1911.....	893,953	937,955	44,002	98,000
1911-1921.....	937,955	1,000,328	62,373	92,000

The population, it will be seen, continued to increase even during the periods of heaviest emigration. The explanation is, of course, that while the provinces were losing population in the most vigorous age periods, they were constantly being recruited by new births, immigration, and the return in middle age of people who had formerly resided in the Maritime Provinces. In Nova Scotia and New Brunswick, these factors have always been more than enough to counter-balance the losses by death and emigration; in Prince Edward Island, however, they have not been sufficient since 1891 to prevent the population from diminishing.

\* \* \*

One further method may be used to show how the composition of the population of the Maritimes is affected by emigration and immigration. Using life tables again to estimate the deaths to be expected in a period of 30 years, let us ascertain how many of the male population of the Maritimes in 1891 were still living in the Maritimes in 1921, how many were living elsewhere, and how many had died. The results of the calculation are as follows:

TABLE X.—Emigration and Mortality since 1891.

(Minus sign indicates return of emigrants to the Maritimes in later life, or possibly discrepancies in age returns.)

Age in 1891	1891 Male population	1921 Still living in Maritimes	1921 Living elsewhere	1921 Dead
5- 9.....	55,802	30,993	16,881	7,928
10-14.....	54,316	27,412	17,491	9,413
15-19.....	49,985	25,453	13,920	10,612
20-24.....	41,864	22,197	9,044	10,623
25-29.....	31,459	17,201	4,592	9,666
30-34.....	25,744	16,260	— 364	9,849
35-39.....	23,112	13,255	— 1,204	11,061
40-44.....	21,257	9,685	— 1,057	12,629
45-49.....	19,412	6,623	— 1,275	14,064
50-54.....	17,384	3,612	— 777	14,549
55-59.....	12,766	1,528	— 671	11,909
60-64.....	13,423	386	— 270	13,307
5-64.....	366,524	174,605	56,310	135,610

The foregoing table shows that, of 366,524 males between 5 and 65 living in the Maritime<sup>8</sup> in 1891, some 230,914 were still alive in 1921; of these, however, only 174,605 were in the Maritimes, 56,310 living elsewhere. The calculation is not complete, for in the table the fact is omitted that some of the elderly population reported in 1921 were not identical with the younger population of 1891 but were immigrants who had taken the places of the latter in the census. To correct the calculation for this factor it is necessary to deduct from the number of the original male population still living in the Maritimes, the number of males between 35 and 95 included in their numbers who came to the Maritime Provinces as immigrants since 1891. This number must likewise be added to the 56,310 already ascertained to be living elsewhere. We learn from the census of 1921 that the population of the Maritimes in 1921 included 35,410 immigrant males, of whom more than three-quarters arrived later than 1900. If we estimate that 25,000 of these immigrants arrived later than 1891 and were between 35 and 95 years of age in 1921, the final estimate becomes approximately as follows:

Male population 5-65 in 1891.....	366,524
Died since 1891.....	135,000
Living in Maritimes 1921, about.....	150,000
Living elsewhere 1921, about.....	80,000

\* \* \*

How many former residents of the Maritime Provinces were living elsewhere in 1921? We can make a minimum estimate by the same method as before. Taking as basis the number of persons in each age and sex group who are calculated to have left the Maritimes in each decade, and calculating by means of the same life tables (1901) how many of these emigrants were probably still living in 1921, the following result is obtained:

TABLE XI.—Age and sex distribution in 1921 of the emigrant population formerly residing in the Maritimes, based on net emigration tables.

Age 1921	Surviving emigrants from Maritimes		
	Male	Female	Total
15-19.....	2,556	2,183	4,739
20-24.....	8,534	5,398	13,932
25-29.....	12,917	12,000	24,917
30-34.....	16,181	14,803	30,984
35-39.....	16,459	17,404	33,863
40-44.....	16,974	17,756	34,730
45-49.....	16,694	18,955	35,649
50-54.....	15,351	16,580	31,931
55-59.....	12,758	14,210	26,968
60-64.....	8,052	10,655	18,707
65-69.....	3,392	4,844	8,238
70-74.....	923	1,672	2,595
75-79.....	351	725	1,076
Totals.....	131,144	137,185	268,329

In the preceding table, we have not yet taken into account the additional emigrants whose places were taken in the census by immigrants. For this purpose, we must add to the number of former residents of the Maritimes living elsewhere almost the whole number of the immigrant population of the Maritimes over 15 years of age. The result of this correction is to show that the number of former residents of the Maritimes who were living elsewhere in 1921 was not less than 325,000. The above table shows the age and sex distribution of a large sample of them.\*

\* \* \*

This movement of population interacts with other social and economic conditions. It is itself a result of such conditions as the falling demand for labour on the farms, the attraction of the cities, the opening of the Canadian west, the fluctuating fortunes of the fishing and mining industries of the Maritimes, the rise or decline of the textile industry in New England, and partly of social custom.† At the same time, emigration is also in itself a cause of other social and economic conditions which in their turn affect emigration. We have therefore to consider an interaction of forces rather than a simple relation of cause and effect. The rest of this memorandum is devoted to an expansion of this aspect, the interaction of forces just referred to being dealt with under the six following headings:—

- I. Age Distribution.
- II. Sex and Marital Conditions.
- III. Birth, death and marriage rates.
- IV. Racial elements—The foreign-born.
- V. Rural and Urban distribution.
- VI. Occupations.

#### **I. The Interaction of Emigration from the Maritime Provinces and the Age Distribution of the Population.**

It has been pointed out that the Maritime Provinces have been, for over forty years losing population from the age groups 15-45, and gaining population by births, by the return of the middle-aged, and by new immigration, the latter however being insufficient to repair the losses from the 15-45 groups. The result is that when we compare the population of the Maritimes with that of a province which is receiving immigration and is not losing by emigration, we find that the latter has a larger percentage of population in the vigorous and productive years of life, while the province which is losing has a larger proportion in the dependent years of childhood

\*The figures of net emigration, upon which this table is based, are derived from Census data, and we therefore have no estimate of the number of persons who were born in the Maritimes after one census and left them before the next census. Similarly we have no record of immigrants who came to the Maritimes after one census and left before the next one. Had it been possible to include these two classes of emigrants from the Maritimes, it is probable that estimates of emigration from these provinces would be increased. In particular, the estimate of the number of living ex-residents of the Maritimes would be larger.

†The importance of social custom is indicated by the fact that the immigrant population of the Maritimes was increasing during 1901-1921 concurrently with a large outward movement of the native-born population. Further, a considerable proportion of the immigrants in recent years (especially since 1911) have remained in the Maritimes. If the economic conditions in the Maritimes had been such as to necessitate all the emigration which has taken place among the native-born, the immigrants would perhaps have been even more likely to emigrate to other provinces or to the United States. For when a man has left his native country to better himself, he has already proved his willingness to sacrifice old associations for economic wellbeing; he has already submitted to change and dislocation in his life—and if his adopted country should prove disappointing, he is not likely to shrink from leaving it for a more attractive one. Most of the emigrants who left Canada between 1911 and 1921 were foreign-born.

and old age. For example, comparing the Maritimes with Ontario, in 1921 out of every hundred persons, the following numbers were in the given age groups:

TABLE XII.—Percentages of Population by Age Groups, 1921.

Age Groups	Prince Edward Island	Nova Scotia	New Brunswick	Ontario
Under 15.....	32.50	33.92	36.04	30.20
15-65.....	57.90	58.85	57.78	63.93
Over 65.....	9.60	7.23	6.18	5.87

If the population between 15 and 65 be regarded as performing most of the work of the community, and the population outside these limits as depending on the work of the former class, Ontario ought to produce more wealth per 100 of population than the Maritime Provinces, if merely for the reason that more of the hundred are at the productive ages. For—to summarize the figures just given in a slightly different form,—out of each 100 people: In Prince Edward Island, 58 people have to support themselves and the other 42; In Nova Scotia, 59 people have to support themselves and the other 41; in New Brunswick, 58 people have to support themselves and the other 42; in Ontario, 64 people have to support themselves and the other 36. In other words, in Ontario, the crew is larger by 6 people and the passengers less numerous by the same number. The Western provinces are even more favourably situated than Ontario in this respect.

This contrast between the provinces is the stronger if, instead of regarding all the people between 15 and 65 as producers and the others as non-producers, we concentrate attention on smaller groups at the most vigorous ages who are almost certain to be producers. Thus the following percentages of population consisted of males between 20 and 30:

TABLE XIII.—Percentages of Male Population of age 20-30.

—	Canada	Prince Edward Island	Nova Scotia	New Brunswick
1881.....	8.72	8.78	8.26	8.49
1891.....	8.94	8.25	8.48	8.14
1901.....	8.82	7.63	8.73	8.22
1911.....	10.50	7.46	8.33	8.04
1921.....	7.95	7.35	7.80	7.74

During the first fifteen years of the century, when the youthful population of Canada as a whole was growing very rapidly, that of the Maritime Provinces remained stationary or actually decreased. Since 1911 there has been a general movement in the other direction, due partly to war losses and more largely to general economic conditions which have caused a number of immigrants to leave Canada; this has lessened the difference between the Maritime Provinces and the rest of Canada.

The following statement, however, agrees with the former one in showing how the Maritime Provinces failed to participate in the influx of young people which benefited the rest of Canada before the war. While the latter increased 65 p.c., the Maritimes as a whole stood still (Nova Scotia and New Brunswick gaining, but Prince Edward Island going back):

TABLE XIV.—Population of Age 20-25.

	Canada	Prince Edward Island	Nova Scotia	New Brunswick
1881.....	429,405	10,893	41,574	31,235
1891.....	473,057	10,311	43,223	30,032
1901.....	508,804	9,331	43,788	30,723
1911.....	706,290	8,086	43,519	30,935
1921.....	711,211	7,032	43,781	32,336

While it is clear that this difference in age distribution must prejudicially affect production, only a rough estimate of the extent is possible. Estimates of the net value of production are issued annually by the Dominion Bureau of Statistics, but these estimates are limited to the extractive and manufacturing industries, excluding transportation, merchandising, finance, personal and professional services, and all other activities which do not result in the production of "form utilities" although they are none the less productive and necessary. The Bureau's estimates of production therefore include only some two-thirds of the real income of goods and services annually produced by the community. These estimates, for 1921, are reproduced in Col. 2 of Table XV below.\* Dividing the estimates for each province by the population of the province, we obtain the net production per head as shown in Col. 4.

The outstanding fact shown by Col. 4 is that the value of production per head was lower in the Maritimes than in any other province except Manitoba.† If the survey were widened to include the other branches of production mentioned in the preceding paragraph, the position of the Maritime Provinces would be even more unfavourable as compared with that of Ontario and Quebec, since the latter provinces possess more than a proportionate share of the businesses of transportation, merchandising, finance, and professional service.

How far is this difference between the provinces due to the difference in the proportions gainfully employed? Assuming that the number of persons gainfully employed in each province increased from 1911-1921 in the same ratio as the population of the province, it is estimated that the numbers gainfully employed in 1921 were as shown in Col. 3. Column 5 gives the net value of production per person gainfully employed in each province, while Cols. 6 and 7 compare the other provinces with Ontario on a percentage basis. Thus from Cols. 6 and 7 it appears that the production per person gainfully employed in Prince Edward Island was 65 per cent of that in Ontario, while the production per head in Prince Edward Island was only 56 per cent of that in Ontario. The difference measures the extent to which Prince Edward Island was handicapped by having a smaller percentage of population gainfully employed. This handicap was chiefly the result of unfavourable age distribution: i.e. a relatively large proportion of elderly and dependent people and a relatively small proportion of persons at the more productive ages. When all the provinces are compared in this way with the province of Ontario, it is evident that the Maritime Provinces, Quebec, and even Manitoba are measurably handicapped in production by their relatively unfavourable age distribution, while Saskatchewan, Alberta, and especially British Columbia enjoy an advantage over Ontario in this respect.

\*See also pages 35-36.

†Manitoba had a small crop in 1921.

TABLE XV.—How Age Distribution affects production per head in various Canadian provinces.

Province	Value of net production 1921 (000 omitted)	Persons gainfully employed 1921 (est.)	Production per head 1921	Production per person gainfully employed	Production per head (Ontario = 100)	Production per person gainfully employed (Ontario = 100)
1	2	3	4	5	6	7
	\$		\$	\$		
Prince Edward Island.....	18,911	30,164	213	630	56	65
Nova Scotia.....	130,280	184,456	249	708	66	74
New Brunswick.....	85,997	132,818	222	647	58	67
Quebec.....	735,446	768,995	311	956	82	99
Ontario.....	1,115,962	1,160,367	380	962	100	100
Manitoba.....	139,819	235,509	229	592	60	62
Saskatchewan.....	232,037	320,769	306	723	80	75
Alberta.....	154,377	254,083	262	608	69	63
British Columbia.....	198,941	275,485	379	723	100	75

Why is it that the Maritime Provinces did not attract a larger share of the immigrants who were coming to Canada in such large numbers from 1900 on, and could not absorb into their labour market their own young people as these reached maturity? The answer is doubtless in part to be found in the industrial situation. It is an economic commonplace that new population arrives on the scene already equipped with wants and prepared to give employment in satisfying these wants. To establish new businesses or to expand existing businesses requires capital and the skill of entrepreneurs. The settlement of the Prairie Provinces brought concurrent prosperity and growth to Ontario's industries (the latter's favourable geographical position assisting) to such an extent that they absorbed the young people growing to maturity in Ontario and even more drawn from outside.\* The impetus gained in the period before the war—in the form of capital accumulation, good will, technical development, trained personnel, and enterprising skill—were sufficient to carry on the industry of Ontario even when conditions had become less favourable. But in the Maritimes, speaking generally, this does not appear to have happened. Whatever the full causes to be assigned, it may be here pointed out that the supply both of skilled labour and of organizing ability, so necessary to industrialization, had been impoverished by the emigration. For the drain of population from this section was as we have just seen a drain of the ages and classes which recruit skill and enterprise. Those who emigrate—at least in North America—are likely to take away with them rather more than their proportionate share of the energy and adaptiveness of the community; and especially is this the case when their ages fall within the category shown for the emigrants from the Maritime Provinces.

Thus emigration of the younger elements, by depleting the supply of labour and enterprise, hinders the establishment of new businesses, and itself becomes a cause of further emigration. The subject of rural and urban distribution, with which this topic is allied, is dealt with further on (pp. 24-27).

\*For an account of how the opening of the West during 1900-1913 reacted on the industrialism of the East, see report of the Board of Inquiry into the Cost of Living in Canada, 1914, Vol. II., pages 1044-1071.

## II. The Relation between Emigration and Sex Distribution and Martial Conditions in the Maritimes.

It has been shown (Table VII) that the most common age for emigration from the Maritimes is from 15 to 30. Female emigrants are more concentrated between these ages than are males. More males than females emigrate when under 20; more males than females return to the Maritime Provinces in middle age. Taking all ages together, however, we find that the net loss of male residents by emigration in any decade is slightly less than the net loss of female residents during the same period. Thus emigration is no longer regarded as so great an undertaking that females need shrink from it; or perhaps it is that woman's industrial sphere has so expanded that there are as many opportunities for women emigrants as there are for men.

In examining the census\*, we note the fact that during most of the history of Canada, males have outnumbered females in almost every age group except in old age, where more favourable mortality rates give women a slight preponderance. This phenomenon, so different from what is found in Europe, is due to the fact that males have formed the majority among immigrants. Generally speaking, where a country has a majority of males at all ages, it is probably receiving immigration; where it has a majority of females at most ages, this is probably due to losses by emigration or by war.

To the previous statement that the males outnumber the females in most age groups in Canada, there is one other striking exception. In 1921 the males were in a minority of 974 to 1,000 between the ages of 20 and 25. In 1911, the males between 10 and 15 were in a majority of 1,027 to 1,000. What has caused this change? Chiefly war losses, although emigration may have played some part.

In the Maritime Provinces, the sex distribution is somewhat different from that of the rest of Canada. In Prince Edward Island, the males have usually been in the minority in all age groups between 25 and 40 from 1881 to 1911, although in 1921 the group 25-29 alone still showed this peculiarity. The explanation is that net male emigration has usually been in excess of female emigration from Prince Edward Island, but not from the other two provinces. In Nova Scotia and New Brunswick the emigration of males has been partly counteracted by immigration, but this has not occurred to the same extent in Prince Edward Island.

From the social point of view, the ratio of males to females is of importance in that it affects the possibility of marriage. Where either sex is much in the majority over the other in corresponding age groups, a larger number of the sex which is in the majority must be celibate. But in this connection it should be remembered that men usually marry women two to five years younger than themselves. The ratio which is most important for this purpose is therefore not the number of men of a given age to each thousand of women of the same age but the number of men of a given age to each thousand women two to five years younger. When we examine the age and sex distribution of the Maritime Provinces from this point of view, we find that the women of each age group are more numerous than the men two or three years older. §

But this inequality is much increased by emigration. Women of twenty, who would normally marry among the men of twenty-two or twenty-three, find that the numbers of the latter have been decreased not only by the deaths of two or three extra years, but also by emigration, in which the men have outstripped the women because they arrived first at the emigrating ages. This explains the presence of so many "surplus women" in the Maritimes. If the young men leave the Maritimes in search of better opportunities, this motive is strengthened in the case of the women by the fact that the emigration of the men two or three years older has left them in the majority. It would not be surprising, indeed to find that the women emigrants outnumbered the men on this account. and on looking back at Table VII we find that the female emigrants actually do outnumber the males in each decade subsequent to 1891. The emigration

\*See Table 3, Vol. 2, Census of 1921.

§See Table 4, Vol. 2, Census of 1921.

of young women is thus promoted both by the search for business opportunities and by the impossibility of marriage if all remain in the Maritimes. In this way, too, male emigration, by disturbing the proportions between the sexes, becomes a cause of female emigration.

The following tables illustrate the excess of females over males three years older in the Maritime Provinces as compared with the other provinces.

TABLE XVI.—Numbers of Females, by ages, compared with males three years older, illustrating Marriage Opportunities for Women.

Age of females	Prince Edward Island		Nova Scotia		New Brunswick	
	Number of females	Males 3 years older	Number of females	Males 3 years older	Number of females	Males 3 years older
15-19.....	4,247	3,907	25,911	23,142	19,358	17,607
20-24.....	3,512	3,159	22,261	20,027	16,441	14,602
25-29.....	3,067	2,716	18,922	17,704	13,953	12,789
30-34.....	2,467	2,415	15,658	15,821	11,726	11,502
35-39.....	2,524	2,530	15,198	16,451	11,157	10,445
40-44.....	2,250	2,013	13,191	13,574	9,546	8,545
	Quebec		Ontario		Manitoba	
15-19.....	122,990	105,499	126,613	120,363	26,912	25,360
20-24.....	104,578	89,372	123,382	116,050	23,930	24,087
25-29.....	89,069	80,861	120,191	118,631	24,565	27,110
30-34.....	77,718	72,863	110,849	110,752	22,686	26,022
35-39.....	69,035	68,052	105,813	108,700	21,091	24,685
40-44.....	58,029	54,229	90,648	83,827	16,196	17,019
	Saskatchewan		Alberta		British Columbia	
15-19.....	30,393	30,804	21,072	24,378	18,494	18,483
20-24.....	27,068	32,000	21,963	24,783	17,747	19,178
25-29.....	27,802	37,715	21,564	30,522	19,092	26,417
30-34.....	26,525	36,964	19,908	30,137	20,198	29,848
35-39.....	24,220	33,209	15,538	28,282	20,901	32,366
40-44.....	18,004	21,681	11,130	18,818	17,067	22,759

If the view above expressed is sound, we should expect to find among women of any age group, the largest proportion of unmarried in the Maritimes, and this is borne out in Table XVII.

TABLE XVII.—Percentage of unmarried women in each age group.\*

—	20-24	25-29	30-34	35-39	40-44	45-49
Canada.....	57.0	28.7	17.2	13.1	11.9	11.1
Prince Edward Island.....	68.9	38.1	24.7	19.1	16.0	11.9
Nova Scotia.....	60.9	31.7	18.7	13.9	12.6	11.8
New Brunswick.....	56.4	29.4	18.7	14.2	12.7	11.4
Quebec.....	61.6	33.1	20.6	15.3	13.8	12.1
Ontario.....	59.6	31.5	19.6	15.7	14.4	13.6
Manitoba.....	52.7	24.4	13.7	9.9	8.3	6.7
Saskatchewan.....	41.1	16.0	7.6	5.0	4.8	4.5
Alberta.....	42.5	16.8	8.6	5.9	5.5	5.0
British Columbia.....	52.9	24.1	12.8	9.1	7.8	7.8

\*Abridged from Table 29, Vol. II, Census of 1921.

The above table shows that in Prince Edward Island the percentage of women remaining unmarried is higher than in any other province, at practically every age. Comparing for example, Prince Edward Island with Saskatchewan: in Saskatchewan only one woman out of

thirteen remains unmarried at the age of 30 to 35; in Prince Edward Island the proportion is one out of every four. Yet this comparison understates the disadvantages of Prince Edward Island, for the main reason why the percentage of the unmarried women here is so small is that so many of the unmarried women have left the province. In Nova Scotia and New Brunswick the percentage of women emigrating is even higher, thereby reducing the percentage of those within the province who are still unmarried; if the unmarried women remained within these provinces, the position would clearly be worse. It may be added that Quebec and Ontario, which also show a high percentage of celibacy, are also losing a considerable amount by male emigration.

In a previous paragraph it was pointed out that the crude birth and marriage rates of the Maritime Provinces were reduced by the emigration of young people at the most vigorous ages of life. We may now say in addition that the birth rate is further reduced by reason of the fact that on account of male emigration, so many of the young female population are obliged to remain celibate. This is another way in which emigration tends to reduce natural increase.

Has this proportion between the sexes any other economic effects? Without minimizing the importance of women in industry and commerce, it may be said that a differential emigration which takes away men in greater numbers than women is particularly serious for the economic development of a country. Certain types of industry (extractive and manufacturing) become almost impossible; others are apt to be more conservatively managed, and the proportion of non-productive persons in the population will be increased. Up to the present, net female emigration from Nova Scotia and New Brunswick has more than kept pace with male, and it is only in Prince Edward Island that the male emigrants have been in the majority and where consequently the females remaining in the island have been in the majority between 25 and 40. Of late years, female emigration even from Prince Edward Island has more nearly kept pace with male, and in certain ways this would appear to be advantageous.

### III.—On the Interaction of Maritime Emigration and Birth, Death and Marriage Rate—Review of Natural Increase.

The argument under this heading largely rests on points which have been brought out in the sections on age and sex distribution preceding:

(1) Emigration by reducing the percentage of the young and vigorous, reduces the percentage of possible parents and so lowers both the marriage rate and the birth rate.

(2) By creating a surplus of females over males two or three years older, it leads to increased emigration of females; but as this emigration hardly ever overtakes the emigration of males, the result is enforced celibacy among many of the female remaining in the provinces. This is a familiar phenomenon in countries from which there is a large emigration. One of its results is to decrease the crude birth rate.

(3) By reducing the percentage of young and vigorous people in the Maritimes, emigration increases the percentage of infants and elderly people. Mortality rates are especially high among both of these classes: hence emigration causes a higher crude death rate.

These results are manifest in the following vital statistics:

TABLE XVIII.—Marriage Rates per 1,000 Population.

	Prince Edward Island	Nova Scotia	New Brunswick	Canada
1920.....	6.8	8.5	9.8	9.4
1921.....	5.8	6.8	8.4	8.0
1922.....	6.6	6.0	7.1	7.1
1923.....	5.2	6.1	7.4	7.2
1924.....	4.6	5.6	7.4	—

Marriage rates are affected by mode of living and by business fluctuations as well as by the distribution of population, but it is notable that the rates for Prince Edward Island and Nova Scotia are lower for each year than those for Canada as a whole. New Brunswick has not suffered so greatly from emigration as the other two provinces.

TABLE XIX.—Birth Rates per 1,000 Population.

	Prince Edward Island	Nova Scotia	New Brunswick	Canada
1920	25.9	25.3	29.9	29.4
1921	24.3	24.9	30.2	29.3
1922	24.5	24.0	29.5	27.8
1923	22.5	22.0	27.0	26.1
1924	20.0	21.9	26.7	—

The birth rates given above do not show the effects of emigration so clearly as might be expected, but this is explained by other factors. In Prince Edward Island—perhaps on account of rural conditions—the fertility of wives is some 30 per cent greater than that of wives of corresponding ages in the Registration Area of Canada as a whole\*. This excess of fertility is more than neutralized by the small proportion of women who are of fertile ages and the still smaller proportion of such women who are married. In New Brunswick, where some 31 per cent of the population is of French-Canadian origin, while conditions of life in most of the provinces are rural in addition, wives show fertility about 24 per cent in excess of that of wives of corresponding ages in the Registration Area as a whole. This excess fertility also is nearly neutralized by the distribution of women in that province with respect to age and marital condition; although it is to be observed that New Brunswick has suffered far less in these respects than either Nova Scotia or Prince Edward Island. In Nova Scotia, the fertility of wives is some 10 per cent greater than that of the Registration Area as a whole; and that excess also is neutralized by the unfavourable distribution of females with regard to age and marital condition.

Death rates are closely correlated with birth rates. Since nearly one-tenth of the infants born die in the first year of life, a province with a high birth rate is likely to have a high crude death rate. This no doubt partly explains the slightly higher death rate in New Brunswick as compared with the other Maritime Provinces.

TABLE XX.—Crude Death Rates per 1,000 Population.

	Prince Edward Island	Nova Scotia	New Brunswick	Canada
1920	14.4	14.5	15.6	13.7
1921	13.6	12.3	14.2	11.6
1922	12.6	12.6	13.2	11.3
1923	13.0	12.9	12.6	11.4
1924	10.8	12.2	12.3	—

From the above table it appears that the Maritime Provinces have a higher crude death rate for each year than the nine provinces of Canada as a whole. This is true although the figures for the nine provinces, with which comparison is being made, include figures for Quebec province, where, because of the high birth rate, the death rate is also very high.

The comparison which best of all brings out the difference in vital statistics is obtained by placing the rates of natural increase in juxtaposition. The rate of natural increase is calculated by deducting the death rate per thousand from the birth rate per thousand. The comparison is as follows:

TABLE XXI.—Natural Increase per 1,000 Population.

	Prince Edward Island	Nova Scotia	New Brunswick	Canada
1920	11.5	10.8	13.4	15.6
1921	10.7	12.6	15.9	17.8
1922	11.9	11.4	16.3	16.5
1923	9.5	9.1	14.4	14.7
1924	9.1	9.7	14.4	—

\*From an unpublished report, Dominion Bureau of Statistics.

The foregoing table shows that the rate of natural increase in the Maritime Provinces is substantially less than that in Canada as a whole. It is apparent that emigration from the Maritime Provinces is one of the principal causes of this difference, inasmuch as it has reduced the proportion of potential mothers in the population and increased the proportion of persons subject to high death rates.

**Historical Review of the Decline in Natural Increase in the Maritime Provinces,  
1861-1921.**

Although there are no reliable vital statistics for the Maritime Provinces which go back to 1861, yet it is possible to make an estimate of natural increase from census material, by methods which will be explained below. The data for this estimate are to be found in the summary of conclusions regarding emigration from the Maritime Provinces.

**TABLE XXII.—Natural Increase, Maritime Provinces, 1861-1921.**

1861-71—Population 1861.....	663,761
Increase during 1861-71.....	103,654
Immigrant population decrease.....	23,000
Total increase of native population.....	127,000
Emigration of natives, about.....	15,000
Natural increase*.....	142,000, about 21%
1871-1881—Population 1871.....	767,415
Population increase.....	103,281
Immigrant decrease.....	11,000
Increase of native born.....	114,000
Emigration of natives nearly.....	40,000
Natural increase*.....	154,000, about 20%
1881-1891—Population 1881.....	870,696
Population increase.....	10,041
Emigration.....	104,000
Increase, total.....	114,000
Immigrants 1881-1891 present in 1891.....	9,000
Natural increase*.....	105,000, about 12%
1891-1901—Population 1891.....	880,737
Population increase.....	13,000
Emigration.....	111,000
Total increase.....	124,000
Immigrants 1891-1901 present in 1901.....	17,000
Natural increase*.....	107,000, about 12%
1901-1911—Population 1901.....	893,953
Population increase.....	44,000
Emigration.....	99,000
Total increase.....	143,000
Immigrants 1901-1911 present in 1911.....	24,000
Natural increase*.....	119,000, about 13%
1911-1921—Population 1911.....	937,955
Population increase.....	62,373
Emigration, etc.....	93,000
Total increase.....	156,000
Immigrants 1911-21 present in 1921.....	31,000
Natural increase*.....	125,000, about 13%

\* "Natural increase" includes births to immigrants who have arrived during the decade under review, as explained below. It is thus slightly over-stated in each case, since it is not all due to the population at the beginning of the decade.

In explanation of this calculation it may be said that for each decade we know from the census the increase of population, together with the difference between immigration and emigration. From these two factors we can calculate the surplus of births over deaths. Thus the increase of population between 1911 and 1921 was approximately 62,000. It would have been more had it not been for emigration. We must therefore to obtain total increase add to the increase of resident population the number of emigrants. Deducting that part of the total increase due to immigration, we obtain as residue the natural increase—that is, the surplus of births over deaths occurring in the three provinces during the given period. Expressing this as a percentage of the initial population, we have the natural increase as a percentage of total population. The so-called natural increase includes births to immigrants who have arrived during the decade; the error, however, is relatively small.§

Do these estimates agree with known facts (above quoted)? For the years 1920-1924 we have reliable statistics of the rate of natural increase in the Maritime Provinces. During these years, the average rate is not very far from the estimate of 13% for the ten years 1911-1921, although there is evidently a new decline in the rate of natural increase since the war.

In the late seventies or the early eighties there began a decline in the birth rate in practically all the countries of Europe. We find that a similar decline set in at about the same time in the Maritime Provinces. In the European countries the most rapid decline took place in the period 1870-1890, with a lessening of the rate of decline in the nineties, and a more rapid decline again between 1900-1910. In the Maritime Provinces the decline occurs quite abruptly in the period between 1881-1891 when, in addition to the causes operating in Europe, the country was suffering from economic depression and widespread emigration of the young and vigorous. In the Maritime Provinces there is no evidence of any further serious decline of the birth rate from 1881 to 1921†. Since 1921 there has been a slight decline.‡

#### IV. Origins and Birthplaces of the People of the Maritime Provinces.

In an historical survey of population in the Maritime Provinces it is of importance to consider what are the sources from which they derive their population, whether the racial composition of the population has been changing, and whether there is any tendency for a native born population to be replaced by an immigrant population or *vice versa*.

The population of the Maritime Provinces in 1921 was almost entirely of British birth. Less than three per cent of the total number of inhabitants were born in non-British countries. Recent immigration has been largely from England, although there has been a small movement from the other Canadian provinces, and Nova Scotia has received a considerable number of immigrants from Newfoundland. The full particulars for the Maritime Provinces can be compared with those of the other Canadian provinces by reference to the returns of the 1921 Census.\*

With regard to the racial origins of the people, there has been little change since 1881 in Prince Edward Island or Nova Scotia, where the population continues to be mainly British, although

§Taking the decade 1911-1921, let us suppose that the 31,000 immigrants who arrived during this decade were in the country five years on the average, and that the crude birth rate among them was 40 per thousand—which is considerably higher than the crude birth rate of Quebec. Then the number of births to them during the ten years would be 200/1000 of 31,000, which is approximately 6,000, or less than 5 per cent of the whole “natural increase” calculated for this period. The “natural increase” for this period we calculated at about 13 per cent. Even if 5 per cent of this estimate be deducted, the corrected estimate would still be between 12 and 13 per cent for the decade.

†There must have been a slight decline, since the rate of natural increase did not become higher despite the general fall in death rates.

‡The above calculation could be made a little more accurate if all ages from 0-100 had been taken into account in calculating the emigration, instead of only the ages 5-45. The error involved is not large. Ages over 45 were omitted from the calculation because of their inaccuracy, the difficulty of estimating deaths, and the tendency of emigration and immigration to balance after these ages.

\*See Tables 36 and 37 of Vol. 2, 1921 Census (Birthplaces of the population) and Table 61 of the same volume (Immigrant population classified by year of arrival).

it is noticeable that in these provinces the English stock is gaining at the expense of the Irish and Scottish. Thus in Nova Scotia the change which has taken place during the past forty years may be summed up in the following comparison:

Nova Scotia	1881	1921
Percentage of English origin.....	29.28	38.58
Percentage of Scotch origin.....	33.14	28.25
Percentage of Irish origin.....	14.99	10.63

A similar process is taking place in Prince Edward Island.

Prince Edward Island	1881	1921
Percentage of English origin.....	19.66	26.31
Percentage of Scotch origin.....	44.94	37.73
Percentage of Irish origin.....	23.34	21.15

In New Brunswick the change is more striking. In 1881, seventeen per cent of the population were of French origin and most of the remainder were of British races. In 1921, the percentage of French had risen above thirty-one, and that of British races had shown a corresponding decline. This change is not due to immigration from the province of Quebec. It is clearly shown by the successive censuses of Canada that the total migration from Quebec to New Brunswick since 1851 does not exceed fifteen thousand persons, and the number is probably even less. The following statement shows the number of residents of New Brunswick returned in each census as having been born in Lower Canada or the province of Quebec:—

1851.....	None	1891.....	3,602
1861.....	None	1901.....	4,293
1871.....	2,440	1911.....	5,300
1881.....	3,127	1921.....	8,579

The increase in Quebec-born population of New Brunswick during each decade as shown by the above table may be compared with the increase in the number of persons of French origin as follows:—

Decade	Increase in number of residents of New Brunswick born in Quebec	Increase in number of residents of New Brunswick who are of French origin
1871-81.....	687	
1881-91.....	475	
1891-1901.....	691	23,344
1901-1911.....	1,007	18,632
1911-1921.....	3,279	22,500

From the above figures it is clearly evident that the increase in the population of New Brunswick of French origin is not due to immigration from Quebec, or (as the census shows) from any other French centre. It is due to more rapid natural increase or to less extensive emigration, or perhaps to a combination of the two causes.

The facts appear to lend themselves to the following interpretation: The "British" races, especially the Irish and Scotch, have been steadily declining in New Brunswick, either because of their failure to reproduce or because of their greater tendency to emigrate in search of better opportunities; probably both factors are at work. It would seem, indeed, that these races are especially subject to the attractions of city life. The French also emigrate; but either they

emigrate in small numbers, or their rate of natural increase is so high that it exceeds the emigration rate. Whatever be the causes, the conclusion is clear. If emigration from the Maritime Provinces continues on the present scale, and if there is no considerable change in the rates of natural increase characteristic of the various races, the proportion of people of French origin will increase with constantly greater rapidity.

Is there any tendency for a native born population in the Maritime Provinces to be displaced by an immigrant population? To answer this question Table XXIII provides the materials:

TABLE XXIII.—Native and Immigrant Population.

Census	Numbers		Percentages	
	Native born (i.e. born in Canada)	Immi- grants	Native born	Immi- grants
<b>PRINCE EDWARD ISLAND</b>				
1861.....	63,027	*17,830	77.9	22.1
1871.....	80,271	*13,750	85.4	14.6
1881.....	99,297	9,494	91.2	8.8
1891.....	102,680	6,398	94.1	5.9
1901.....	99,006	4,253	95.8	4.2
1911.....	91,154	2,574	97.3	2.7
1921.....	86,250	2,365	97.3	2.7
<b>NOVA SCOTIA</b>				
1861.....	298,192	32,665	90.1	9.9
1871.....	358,560	29,240	92.5	7.5
1881.....	412,859	27,713	93.7	6.3
1891.....	424,081	26,315	94.2	5.8
1901.....	435,172	24,402	95.8	4.2
1911.....	456,063	36,275	92.6	7.4
1921.....	480,332	43,505	91.7	8.3
<b>NEW BRUNSWICK</b>				
1861.....	199,445	52,602	79.1	20.9
1871.....	248,879	36,715	86.8	13.2
1881.....	290,165	31,068	90.3	9.7
1891.....	299,257	22,006	93.1	6.9
1901.....	313,178	17,942	94.6	5.4
1911.....	333,576	18,313	94.8	5.2
1921.....	366,418	21,458	94.5	5.5

\*Including immigration from Canada.

From the above table it is evident that both the absolute numbers and the percentage of immigrants (from other countries) in the Maritime Provinces have been steadily decreasing, except for a slight growth of the immigrant population of Nova Scotia and New Brunswick since 1901, *i.e.*, during the period when Canada as a whole was receiving a large influx of immigrants. This movement has not, however, attained very great relative magnitude.

The loss of population from the Maritimes therefore chiefly affects a population of predominantly British origin; but this population is not being largely replaced by one of different origin except in New Brunswick, where the French section is rapidly growing.

**V. The Influence of the Proportions of Rural and Urban Population upon the situation in the Maritime Provinces.**

During the last half-century, and throughout almost all the countries of the white man's world, there has taken place a movement of population from the country districts to the cities and towns, resulting in a higher proportion of urban population in each succeeding census. Thus, in the United States the percentage of urban population to the total was 35.4 in 1890, 40.0 in 1900, 45.8 in 1910 and 51.4 in 1920. Similarly, in Canada, the percentage of urban population has increased from 31.80 in 1891 and 37.50 in 1901 to 45.42 in 1911 and 49.52 in 1921, this having taken place in spite of the great increase in the settled rural areas in the western parts of both countries. While the line of distinction between rural and urban population is differently drawn in Canada and in the United States, our census regarding many places as urban which in the United States would be considered as rural,† the general trend in both countries is sufficiently clear.

Again, the census of both countries shows not merely a relative decline in the proportion of rural population to total population, but an absolute cessation of the growth of the rural population throughout all the Eastern parts—that is, everywhere where there is not new land to settle. Thus, in Eastern Canada, in spite of the great growth of the last thirty years, in spite of the new rural areas which are being settled in Northern Ontario and Northern Quebec, the rural population in 1921 was actually less by almost 130,000 than in 1891, the figures for each of the five provinces, and for eastern Canada as a whole, being given in the following table:

**TABLE XXIV.—Trend of Rural Population in the Five Eastern Provinces, 1891-1921.**

—	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Total
1891.....	94,823	373,403	272,362	988,820	1,295,323	3,024,731
1901.....	88,304	330,191	253,835	994,833	*1,246,969	2,914,132
1911.....	78,758	306,210	252,342	1,038,803	*1,198,803	*2,875,047
1921.....	69,522	296,799	263,432	1,038,630	1,227,030	*2,895,413

\*See note on page 120, Canada Year Book, 1925.

Similarly, taking the geographic areas of the United States which are nearest to Eastern Canada, viz., the New England States, the Middle Atlantic States (New York, New Jersey, Pennsylvania), and the East North Central States (Ohio, Indiana, Illinois, Michigan and Wisconsin), we have a very similar state of affairs in the last thirty-years period. The figures are as follows:

**TABLE XXV.—Trend of Rural Population in the New England, Middle Atlantic and East North Central States, 1890-1920.**

Census Years	New England	Middle Atlantic	East North Central	Total
1890.....	1,560,850	5,372,448	8,381,124	15,314,422
1900.....	1,538,590	5,378,795	8,765,606	15,682,991
1910.....	1,554,599	5,592,519	8,633,350	15,780,468
1920.....	1,535,836	5,588,549	8,426,271	15,550,656

It is thus evident that the same general causes are at work in the rural areas of both countries, even where those rural areas have a ready market for their produce, the five largest cities of the United States (New York, Chicago, Philadelphia, Detroit and Cleveland), besides many smaller cities, being included in the area whose rural populations are given in the above table.

†In the U.S. census, only places with 2,500 population or more are considered as urban. In Canada, all incorporated cities, towns and villages are considered urban. The population limit therefore varies by provinces.

Even with a remarkably populous and prosperous urban home market at their doors, the rural population of these areas has not increased in recent years. While the lack of increase may to some extent be due to the transfer of growing communities from the rural to the urban class between censuses, yet, in the last decade at least, there has been in certain areas just outside the cities an increase of rural residents who earn their livelihood in the cities, but thanks to the automobile, are able to live in the open country. Thus Connecticut, alone of the New England States, showed an increase of rural population in the decade between 1910 and 1920, this increase being presumably due to the overflow from New York City. We find the same phenomenon in this country in the neighborhood of Toronto and Vancouver.

Newfoundland and Labrador also show a loss of population which may be compared with that of the Maritime Provinces and the New England States. The population of Newfoundland and Labrador in 1901 was 220,984. The surplus of births over deaths, 1901-1911, was 29,833, and the population was also increased by the immigration of 2,692 people, most of whom settled in the capital and smaller towns; but during the same period there was a loss of 10,980 by emigration. In 1911-1921 the surplus of births over deaths was 31,347, the gain by immigration was 1,249, and the loss by emigration was 12,182. In his report on the census of 1921, the Colonial Secretary deplores the loss by emigration of the younger people, and shows how this has resulted in a declining birth rate in the rural districts. Certain districts have shown a constant diminution of population since 1884\*.

If then, rural population throughout all the Northeastern portion of the continent is, except in special circumstances, stationary or even on the decline, it is evident that those geographic divisions which include both rural and urban areas will reflect this decline in proportion to their percentage of rural population. Areas with a very high proportion of rural population will tend to have a relatively stationary total population, while areas with a low percentage of rural population, may, in spite of a stationary rural population, show a normal increase of *total* population. Thus in the United States, Vermont, which has a comparatively small proportion of urban population (31.2 p.c. in 1920), recorded an absolute decline of 3,528 in total population between 1910 and 1920, while the neighboring state of New Hampshire, where similar conditions prevailed in the rural areas, was able, by its larger proportion of urban population (63.1 p.c. in 1920), to record an absolute increase of 12,511 in total population.

Now in Canada, the Maritime Provinces are among those with the highest proportion of rural population. Prince Edward Island had in 1921, 78.45 p.c. of rural population, the highest proportion of any province in the Dominion, while New Brunswick came third with 67.92 p.c. of rural population, surpassed by the 71.10 p.c. of Saskatchewan. Even Nova Scotia with 56.66 p.c. of rural population in 1921, was much more largely rural than Ontario or Quebec with 41.83 p.c. and 43.99 p.c. of rural population respectively and almost as rural as Manitoba, with its 57.12 p.c. of rural population. It is therefore evident that the Maritime Provinces, with a relatively high percentage of rural population, must be particularly affected by the conditions which have brought the rural population throughout all the Northeastern portion of the American continent to a standstill. Yet the total recorded increases of 31,499 in Nova Scotia and 35,987 in New Brunswick in the last decade compare very favourably with the increases of 25,643 in the neighboring state of Maine, and 12,511 in New Hampshire, and with the decrease of 3,528 in Vermont.

\* The Irish Free State, an agricultural country which does not suffer from lack of markets, has likewise declined 5.3 per cent in population between 1911 and 1926. This decline has been chiefly caused by losses of population from the rural districts. Since 1841, the "country districts" have lost 64 per cent of their population; towns of 200 to 500 residents lost 49 per cent, towns of 500 to 2,000 lost 25 per cent, towns over 10,000 other than Dublin and its suburbs dropped 13 per cent, while the metropolis and its adjacent townships gained 47 per cent. It is true that the loss of population between 1911 and 1926, amounting to 166,886 in all, is partly attributable to deaths in war (27,405 soldiers in addition to officers), to the withdrawal of some 34,000 British soldiers and dependents on the signing of the Irish Treaty, to civil disorders, etc., but these abnormal streams of emigration merely made up for the great diminution during the war of the number of ordinary emigrants. The present population of Ireland (north and south combined) is 4,229,124, compared with 4,390,219 in 1911: and the magnitude of the stream of emigration during the past generation may be judged from the fact that 1,817,457 persons born in Ireland are shown by official statistics to be now living in other countries. This exiled population, no less than 43 per cent of the present population of Ireland, "must in itself attract a large number of emigrants' relatives and friends of the exiles every year, no matter how prosperous conditions are in Ireland." (Preliminary Report of the Free State census taken in April, 1926, from which also the figures just quoted have been taken.)

Further, the rate of increase in the comparatively small urban population of the Maritime Provinces during the period and particularly during the past decade has not been very much slower than the rate of increase in the urban population of the other parts of Canada. It is however, a generally observed phenomenon both in Canada and in other countries, that the rate of increase is greatest in the larger cities—which do not exist in the Maritime Provinces. The figures subjoined, show the urban populations of the nine provinces in 1911 and 1921, with the absolute percentage and increases; they indicate that the urban population in New Brunswick and Prince Edward Island increased practically as rapidly during the last decade as that of Ontario, and that the urban population of Nova Scotia increased proportionately as rapidly as that of British Columbia:

TABLE XXVI.—Absolute and Percentage Increase of Urban Population Between 1911 and 1921, by Provinces.

Provinces	1911 Urban	1921 Urban	Numerical increase in decade 1911-21 Urban	Per- centage increase
Prince Edward Island.....	14,970	19,093	4,123	27.54
Nova Scotia.....	186,128	227,038	40,910	21.98
New Brunswick.....	99,547	124,444	24,897	25.01
Quebec.....	966,842	1,322,569	355,727	36.79
Ontario.....	1,328,489	1,706,632	378,143	28.46
Manitoba.....	200,365	261,616	61,251	30.56
Saskatchewan.....	131,395	218,958	87,563	66.64
Alberta.....	137,662	222,904	85,242	61.92
British Columbia.....	203,684	247,562	43,878	21.54

What are the reasons for the comparatively stationary position of the rural population through the whole northeastern portion of the North American continent, whether in Canada or in the United States? Doubtless they are largely social, the desire for the "white lights," for society, the wish to get away from the isolation of rural life, though that isolation has been greatly reduced by the advent of the automobile, the rural telephone and the radio. Nevertheless, the causes of the exodus from the country to the town are preponderantly economic and must be taken account of in any consideration of the population situation in areas where that population is largely rural.

In brief, the population situation in the rural areas of Northeastern America and particularly in the Maritime Provinces of Canada is to be accounted for by three main causes of an economic character:—

(1) The invention of labour-saving agricultural implements, rendering it possible to cultivate equally well a given area of ground with a diminished number of labourers, and a consequent decline of population, since the majority of people, being dependent on their labour for their living, cannot continue to live where there is no longer a market for their labour\*. Thus, one Ontario township in a favoured section of the province near to the Toronto market, declined in population from 6,897 in 1861 to 3,635 in 1921; in other words, there were only 53 people in 1921 for every 100 in 1861†. This great decline in population by no means implies any decline in production—though in view of the changing character of agricultural production during the period, it would require careful study by an expert to equate the volume of production in 1861 and 1921.

(2) The migration of agricultural labour from the less fertile lands of the older provinces to the productive prairie lands of the Canadian and American West, where the labourer is not only more productive but receives a higher reward for his labour.

The whole history of the continent, whether in Canada or in the United States, has been a history of the westward progress of settlement. Thus New Englanders played a great part in

\* It has been estimated that in the United States in 1895 it required only 120,000,000 days of human labour to produce the nine principal farm crops of the year, whereas the same amount of production would have required 570,000,000 days of human labour with the methods in vogue in 1850. (See H. W. Quam-tance "Influence of Farm Machinery on Production and Labour," pp. 27-29.)

† The township of Chinquacousy in the county of Peel, which at its nearest point is within 15 miles of Toronto.

the settlement of the States on the southern borders of the Great Lakes and Iowa, while in this country people from the Maritime Provinces have played an important part in the making of the West. Thus, in 1921 there were some 48,000 persons living in Western Canada who had been born in the Maritime Provinces. There were also in Ontario and Quebec some 22,000 persons who had been born in the Maritimes. Added together, these numbers total about 7 p.c. of the resident population of the Maritime Provinces in the Census year, and this figure takes no account of the descendants of Maritime Provinces people, born elsewhere than in the Maritime Provinces.

(3) The greatest of the economic changes is, however, that which has resulted from the evolution of the methods of production, of transportation and of trade in the past fifty or sixty years. The production of many articles, such as articles of clothing, formerly carried on upon the farm, is now carried on in the city and brings there considerable numbers of young women, who formerly remained on the farm. Again, while fifty or sixty years ago most production was carried on for local and immediate consumption, today it is often for consumption on the other side of the world. Thus a much larger part of the population is engaged in transportation and trade, and this means an increased urban population. Finally, this is the day of the specialist in every line, and the specialist whether in medicine, law or business, has to locate himself where he can find sufficient consumers of his products to enable him to earn a livelihood. These he cannot usually find in rural districts, and consequently he must betake himself where there is an efficient demand for the specialized skill which he has to sell. This, in practice, means that he has to go to the large centres of population. Where, as in the Maritime Provinces, large centres of population do not exist, the student who secures a highly specialized training is, in a very real sense, under sentence of exile. The production of such specialized skill, especially in the fields of intellectual endeavour, has long been implicit in the educational systems of Nova Scotia and Prince Edward Island particularly, and the natural result has been that, as also happens in Scotland, considerable numbers of able and highly-trained men find no field in their own home for the exercise of their skill, and are therefore compelled to seek it elsewhere. Whether the transfer of manufacturing industry from the country to a town is a permanent phenomenon, is in these days of the cheap transmission of electric power, more of a debatable question than in the day of steam. Whether our educational systems should lay less stress upon the purely academic and more upon the practical and technical sides of education, aiming rather to fit the young to take advantage of the opportunities available where they live than to have to seek opportunity elsewhere, is another question which is exercising the minds of educationists. On the answers to these questions depends in considerable measure the future relationship of rural to urban population on this continent and implicitly a large part of the future of the Maritime Provinces.

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## VI. The Growth or Decline of certain Occupation Groups in the Maritime Provinces, 1891-1921.

Any thoroughgoing comparison of the occupations of the people of the Maritime Provinces at different times is rendered difficult by the changes in classification and nomenclature in the census of occupations. The increasing number and complexity of classifications is due to increasing differentiation in industry itself; to the rise of new occupations (such as those of electricians, motormen, chauffeurs, structural steel workers, etc.), and the disappearance of old occupations; and to the change in importance or status of other occupations (e.g. nursing has risen in a comparatively short time from a form of domestic service to a profession, while banking and insurance, formerly subdivisions of "trade and merchandising" in Canadian census figures

<sup>§</sup>The proportion of all gainfully employed Canadians working at agricultural pursuits declined from 48.1 p.c. in 1881 to 34.3 p.c. in 1911, while those engaged in manufactures increased in the same period from 11.7 p.c. to 18.0 p.c., those engaged in transportation from 2.9 p.c. to 8.0 p.c. and those engaged in trade and merchandising from 5.7 to 10.4 p.c.

now form part of a new "finance" group). Not the least important reason for changes in classification is the desire to know more at each successive census, and the improvement of statistical technique to that end.\*

The most striking development since 1891 appears to be the decrease in the number of males gainfully employed in agriculture. In the next preceding section of this memorandum, this was explained by the invention of labour-saving agricultural implements, migration to the west, and the growing importance of urban industry and trade. The latter point is borne out by the increase in the number and percentage employed in manufacturing, trade and transportation throughout the country. But the decrease in the number of male agricultural workers in the Maritime Provinces, though considerable, is not itself sufficient to account for all the emigration which has taken place from these provinces. The number of males gainfully employed in agriculture in 1891 in the three provinces was 131,022. In 1921 it had diminished to 111,800, a decrease of 19,222 in the thirty years. It is true that a decrease in the number of gainfully occupied males involves also a decrease in the population consisting in their wives and children; but even if we supposed that each male lost to the farm involved the loss of four other persons (and this is obviously an over-estimate) the movement away from Maritime farms would not account for a third of the emigration which has taken place since 1891, though unquestionably the farms have been one of the chief nurseries of the emigrants.

TABLE XXVII.—Males engaged in Agriculture, with Proportion to all Males Gainfully Employed.

	Numbers			Percentage of all gainfully employed males.		
	P.E.I.	N.S.	N.B.	P.E.I.	N.S.	N.B.
1891.....	21,411	59,331	50,280	67.62	44.1	53.3
1901.....	20,720	52,836	48,304	67.45	39.1	49.3
1911.....	19,134	47,167	44,840	68.4	31.7	43.4
1921.....	18,057	47,771	45,972	66.8	30.5	40.7

From 1891 to 1911, although the male population engaged in agriculture was decreasing, the area of farm land occupied and the area improved were increasing. This seems to indicate that new machinery or changes in method were enabling a smaller number of people to cultivate and improve a larger area of land. Between 1911 and 1921, however, an opposite tendency appears. The number of males engaged in agriculture increased slightly in Nova Scotia and New Brunswick, but in both of these provinces, farm land began to be abandoned. In Nova Scotia, over 10% of the farm land which was occupied in 1911 had ceased to be occupied in 1921, and during the same period the area of improved farm land was reduced by more than 20%. In New Brunswick, about 6% of the land occupied in 1911 had ceased to be occupied in 1921, while the improved area diminished by more than 5%. In Prince Edward Island, the male farm population continued to decrease, but the occupied area increased a little during this decade, while the improved area nearly held its own. The following tables, abridged from the census of 1921, give the exact figures. The figures for 1871, 1881 and 1891 are not strictly comparable, as before 1901 they show area of lands occupied or improved, and in 1901 the heading changes to farm lands.

\* In early censuses the enumeration was limited to such rubrics as "labourer", "clerk", or "factory worker". In the censuses of 1911 and 1921, persons gainfully employed have been classified according to the general main divisions of industry in which they were employed, the class of worker, and the particular trade or calling. The occupational tables of these two censuses will accordingly provide a much more valuable source of information to the economic historian. Nevertheless, it is possible to compare the numbers engaged in various important groups.

TABLE XXVIII.—Farm Population and Areas.

Census year	Male population gainfully employed in agriculture	Area of occupied farms (acres)	Area improved (acres)
PRINCE EDWARD ISLAND			
1901.....	20,720	1,194,508	726,285
1911.....	19,134	1,202,354	769,140
1921.....	18,057	1,216,483	767,319
NOVA SCOTIA			
1901.....	52,836	5,080,901	1,257,468
1911.....	47,167	5,260,455	1,257,449
1921.....	47,771	4,723,550	992,467
NEW BRUNSWICK			
1901.....	48,304	4,443,400	1,409,720
1911.....	44,840	4,537,999	1,444,567
1921.....	45,972	4,269,560	1,368,023

TABLE XXIX.—Male population aged 10 years or over, gainfully employed in agricultural occupations, per 100 acres.

Year	Occupied land			Improved land		
	Prince Edward Island	Nova Scotia	New Brunswick	Prince Edward Island	Nova Scotia	New Brunswick
1901.....	1.7	1.04	1.09	2.9	4.20	3.43
1911.....	1.6	0.90	0.99	2.5	3.75	3.10
1921.....	1.5	1.01	1.08	2.4	4.81	3.36

For every 100 acres of occupied farm land, Prince Edward Island had, in 1921, 1.5 male farm workers, as compared with 1.01 in Nova Scotia and 1.08 in New Brunswick. It is not surprising, therefore, to find that the percentage of occupied land described as improved is much greater in Prince Edward Island, as shown in the following table:

TABLE XXX.—Percentage of occupied farm land improved.

Year	Prince Edward Island	Nova Scotia	New Brunswick
1901.....	61	25	32
1911.....	64	24	32
1921.....	63	21	30

In Nova Scotia the percentage of land which is improved is not only the smallest in the Maritime Provinces, but it is actually diminishing. This may indicate that a larger part is being treated as natural pasture.

A comparison of the number of farm workers employed per 100 acres of *improved* land from the above table is interesting. In Nova Scotia the number of farm workers per 100 acres of

improved land has been from fifty to a hundred per cent higher than in Prince Edward Island. This might seem to indicate that the Nova Scotia farmers were less efficient, or that they cultivated the land more intensively; the real explanation, however, is probably that so many Nova Scotia farmers combine work on the land with fishing or other occupations.

*Forestry*.—This industry is practically non-existent in Prince Edward Island. Its development in the other two Maritime Provinces is indicated in the following table:

TABLE XXXI.—Males engaged in Forestry.

Census	Number		Percentage of total gainfully employed males	
	Nova Scotia	New Brunswick	Nova Scotia	New Brunswick
1891.....	1,512	1,240	1.1	1.3
1901.....	1,890	1,615	1.5	1.6
1911.....	3,211	4,442	2.1	4.3
1921.....	2,437	4,357	1.6	3.9 (logging)

The figures indicate great growth in this industry in the first ten years of the present century, followed by a period of retrogression.

*Fishing*.—The figures for fishing and hunting are usually given together, but in the Maritime Provinces most of the persons engaged in these occupations are actually fishermen. The figures are as follows:

TABLE XXXII.—Males engaged in Fishing.

Census	Number			Percentage of total gainfully employed males		
	Prince Edward Island	Nova Scotia	New Brunswick	Prince Edward Island	Nova Scotia	New Brunswick
1891.....	911	14,372	2,913	2.9	10.7	3.1
1901.....	1,133	14,146	2,515	3.7	10.3	2.6
1911.....	1,352	14,666	2,842	4.8	9.8	2.8
1921.....	1,180	12,367	2,948	4.4	7.9	2.6

The most striking feature is the absolute and relative decline in the fishing industry since 1911, especially in Nova Scotia, its chief centre.

*Mining*.—The mining figures for Nova Scotia and New Brunswick are given below, (the industry in Prince Edward Island is negligible):

TABLE XXXIII.—Males engaged in Mining.

Census	Number		Percentage of total gainfully employed males	
	Nova Scotia	New Brunswick	Nova Scotia	New Brunswick
1891.....	5,839	340	4.3	0.3
1901.....	7,976	187	5.9	0.2
1911.....	17,134	831	11.5	0.8
1921.....	15,352	801	9.8	0.7

This table reflects a rapid development of mining in Nova Scotia from 1901 to 1911, but this growth was not maintained. Mining continues, however, to employ nearly a tenth of the gainfully employed males of Nova Scotia.

*Manufacturing.*—In this table the 1901 figures are omitted as they include skilled labourers employed in the building trades, who have been omitted from the other figures.

TABLE XXXIV.—Males engaged in Manufactures.

Census	Number			Percentage of total gainfully employed males		
	Prince Edward Island	Nova Scotia	New Brunswick	Prince Edward Island	Nova Scotia	New Brunswick
1891.....	2,943	14,283	11,515	9.3	10.5	12.2
1911.....	1,807	21,601	16,230	6.5	14.5	15.7
1921.....	1,212	18,907	15,458	4.4	12.1	13.7

The table shows that manufacturing, once as important in Prince Edward Island as in the other Maritime Provinces, has almost disappeared from the former. In both Nova Scotia and New Brunswick, there was a moderate growth in the absolute and relative importance of manufacturing before the war, with some retrogression since. Even in 1921, however, the percentage employed in manufacturing was a little greater than in 1891. The figures for females employed in manufacturing cannot be given so fully, but they show much the same fluctuations as those for males.

*Transportation, Trade and Merchandising.*—The figures are as follows:—

TABLE XXXV.—Males engaged in Transportation.

Census	Number			Percentage of total gainfully employed males		
	Prince Edward Island	Nova Scotia	New Brunswick	Prince Edward Island	Nova Scotia	New Brunswick
1891.....	1,039	9,483	5,398	3.3	7.0	5.7
1911.....	1,119	11,098	7,772	4.0	7.5	7.5
1921.....	1,159	13,353	10,182	4.1	8.5	9.0

TABLE XXXVI.—Males engaged in Trade and Merchandising.

Census	Number			Percentage of total gainfully employed males		
	Prince Edward Island	Nova Scotia	New Brunswick	Prince Edward Island	Nova Scotia	New Brunswick
1891.....	1,371	7,684	6,014	4.3	5.7	6.4
1911.....	1,560	11,245	8,087	5.6	7.5	7.8
1921.....	1,721	13,239	9,773	6.4	8.4	8.6

A few other groups could be followed in a similar manner, but the results would have little value because of changes in classification. Figures for the building trades were not separately given in 1901 (being merged with manufactures and domestic and personal service), and even in the years after 1901 it is difficult to know how many general labourers not otherwise specified should be classed with this group. The service group (including custom and repair businesses, domestic and personal service, professions, public administration, and recreational services) has probably been growing in importance.

### Summary of Conclusions

Since Confederation there has been an emigration from the Atlantic Maritime Provinces of approximating 450,000.

During the decade 1861-71, the population of the three Provinces increased from 663,761 to 767,415. This was due to natural increase or arrivals from Canada, since the immigrant population decreased from 103,097 to 79,705 during the same period. There was a moderate emigration of young people during this period—something over 30,000—but at least half of these appear to have been immigrants.

During the decade 1871-1881, population increased from 767,415 to 870,696. This increase also was entirely due to natural increase or arrivals from other parts of Canada, since the immigrant population diminished from 79,705 to 68,275 during the period. Emigration was in excess of 40,000, and most of the emigrants appear to have been natives of the Maritime Provinces. This decade therefore marks the beginning of the pronounced movement of the native born from the Maritimes.

During the decade 1881-1891, the population of the Maritimes increased only slightly—from 870,696 to 880,737. During this period, the provinces lost by emigration about 104,000 inhabitants. About 13,000 of these were immigrants who had come to the Maritime Provinces before 1881; the remaining 91,000 appear to have been native-born. This loss was counterbalanced to a slight extent by the addition of about 9,000 new immigrants. Without such addition the population of the Maritimes would have remained practically stationary during the eighties, the native emigration almost cancelling the natural increase.

From 1891-1901, the population of the Maritimes again showed little increase—namely, from 880,737 to 893,953. During this decade the loss by emigration was heavy, exceeding 111,000. Of these, some 18,000 were foreign born residents who had come before 1891, but the remaining 93,000 seem to have been native-born. The departure of the 18,000 immigrants was nearly counterbalanced by the arrival of some 17,000 new ones who remained in the provinces at least long enough to be enumerated in the census of 1901. As in the preceding decade, had it not been for the arrival of these immigrants, the population of the Maritimes would have shown a net loss, the emigration of the native-born being again almost sufficient to cancel the natural increase.

From 1901 to 1911 the population of the Maritimes began to increase more rapidly, namely from 893,953 to 937,955. During this period the Maritimes lost by emigration about 99,000 residents, of whom about 6,000 were immigrants who had arrived before 1901, while the remaining 93,000 were native-born. Meanwhile some 24,000 new immigrants came in. About half of the increase in population during this decade is thus attributable to immigration and about half to natural increase (including, of course, births to immigrants).

From 1911-1921, population increased still more rapidly, from 937,955 to 1,000,328. During these ten years the Maritimes lost, by emigration and war causes combined, about 93,000 residents, including some 13,000 immigrants and some 80,000 native-born. Meanwhile, over 31,000 new immigrants settled.

From this it appears that emigration from the Maritimes has been in evidence in every decade since Confederation, although the most considerable movement occurred in the eighties and nineties. From 1891 to 1901 the immigrant arrivals were not even sufficient to balance the departures of former immigrants; while emigration from the Maritime Provinces almost cancelled the natural increase of the native-born. Since 1901 immigrant population has been increasing at the average rate of about 1,000 a year, but the native-born population is still emigrating in great numbers. The magnitude of this emigration of the native-born may be illustrated by stating that, in each decade since 1881, the three provinces have lost a native-born population practically equal to that of Prince Edward Island.

Of the male population between 5 and 65 who were living in the Maritimes in 1891, over one third of the survivors were living elsewhere in 1921. There were in 1921 at least 325,000 former residents of the Maritimes who were living elsewhere,—about three-quarters in the United States. This emigration of the native-born was not entirely due to the impossibility of making a living in the Maritime Provinces, for since 1901 the immigrant population has been increasing. The latter increase occurred chiefly before the war, but has also been in evidence on a small scale since.

The effects of this emigration upon the Maritime Provinces may be briefly summarized as follows:—

The emigrants are mostly drawn from the most desirable classes of the population, the majority being native-born of British races. Most of the emigrants leave the Maritimes between the ages of 15 and 30, after having been educated at the expense of the provinces, and when they are young, vigorous, ambitious and enterprising. By their departure the Maritime Provinces lose not only the most efficient type of labour power but also enterprising ability on which further development depends.

Under the age of twenty, male emigration is larger than female, while over twenty, female emigrants are slightly in the majority. Nevertheless the percentage of celibate females in the eastern provinces remains undesirably high.

The effect of emigration in removing the younger and more vigorous elements of the population is to decrease crude birth and marriage rates and to increase crude death rates, thus checking natural increase.

Nova Scotia and Prince Edward Island remain the most characteristically British provinces, and migration has done little to change this. In New Brunswick emigration is helping to reduce the proportion of British stock and to increase the percentage of French origin.

Productivity in the Maritime Provinces is adversely affected by emigration, which reduces the percentage of producers in the population.

The emigration movement from the Maritime Provinces finds a close parallel in the New England States. Both movements appear to be connected with the general tendency of population to leave the farms (where the labourer's task has been so largely taken over by machinery) and flock to the urban centres of manufacturing, commerce, and professional activities. The same phenomenon has been observed in Newfoundland and Quebec; the latter has lost a larger number of people by emigration than the Maritime Provinces, although the high rate of natural increase has prevented the loss from being felt so much.\* Also in Ireland.

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\*Quebec's losses by emigration are calculated as follows: 1881-91, 153,000; 1891-01, 161,000; 1901-11, 98,000; 1911-21, 162,000. Thus the immigration from Quebec in each decade since 1881 has exceeded that from the three Maritime Provinces. Relatively, however, the loss has been less, the population of Quebec being twice as great as that of the Maritimes. As in the Maritimes, emigration from Quebec was heaviest in 1881-1901.



## CHAPTER III.—PRODUCTION AND INDUSTRY

### Part I.—Introductory—General Survey of Production.

A feature of productive industry in the Maritime Provinces is its diversified character—in which respect it stands in strong contrast to a region like the Prairie Provinces. A broad review of Maritime production is given in Table I which shows that several branches of industry contributed major parts to the total net value of \$192,507,000 in 1924, though agriculture outdistanced the others considerably, coming first with a total net production valued at \$65,809,000, or 34 p.c. of the total. Total net value of forestry production amounted to \$41,341,000 of manufactures to \$30,972,000, of mining to \$25,789,000, and of fisheries production to \$15,363,000.\*

#### *Employment in the Maritime Provinces, 1921-1926*

As a sidelight on productive activity and recent industrial conditions in the Maritime Provinces, the monthly record of employment maintained in the Dominion Bureau of Statistics since January 1920 is of value. This record is based on a circular addressed on the first day of each month to every employer having 15 workmen or over.†

Employment in the Maritime Provinces, as in other parts of Canada, showed great activity during 1920. In 1921 there was a marked recession throughout the Dominion, but it was considerably less in the Maritime and Western Provinces than elsewhere. In 1922, on the other hand, employment in the Maritimes and Quebec was on the whole on a lower level than in the rest of Canada. Nineteen hundred and twenty-three saw a general recovery, in which the Maritimes shared. In 1924, however, they fell back to the lowest level throughout Canada, and this relative situation has not materially altered since.

The returns for the nine elapsed months of 1926 indicate a situation which is distinctly better than in 1925, and which tends to improve, the index number for all industries on September 1, 1926, being 96.7, as compared with 88.4 on the same date of 1925.

It is significant that in 1921 these provinces were relatively free from industrial disputes, only 128,343 working days having been lost through such cause, as compared with 324,226 in 1922, 321,603 in 1923, 323,600 in 1924, and 1,478,727 in 1925, when the great strike in the coal mines prejudiced the situation. (See appendix to chap. III for note on labour organization and trade disputes in the Maritimes).

In Table II herewith is given a series of index numbers which shows the comparative activity of employment by provinces throughout Canada. In Table III a survey of the employment situation in the Maritime Provinces by industries for the past four years is given as of December, January, April, July and October, with comparative figures for all Canada. A résumé of Table III is as follows:—

*Manufacturing.*—Employment in manufactures in the Maritime Provinces has recently been at a lower level than elsewhere in Canada; the index averages 88.1 in 1923, 78.0 in 1924, and 75.4 in 1925, while for the January-September period in 1926 it is 77.4, or 2.7 points higher than in the corresponding months of last year. Lumber products in 1926 have shown more recovery than in either of the two preceding years and the seasonal losses last winter were less marked. Pulp and paper has reported a favourable situation during the elapsed months of

\*Table I, it may be explained, is designed to give an inclusive statement for each general industry and at the same time prevent duplication in connection with "border-line" products; e.g., dairy factories are included under agriculture, sawmills and pulp mills under forestry, cement and clay products under mining, etc.; these and similar are also included under "manufactures", but the duplication is eliminated in the grand total. "Net" production represents an attempt to eliminate the value of all material consumed in the production process. The year 1924 is the latest for which the information is uniformly comprehensive.

† During 1925 employment data were received from an average of 523 firms in the Maritime Provinces, whose payroll averaged 65,310; for all Canada the corresponding number of firms was 5,900 and the payroll 761,131.

TABLE I.—Value of Production in Maritime Provinces by Leading Industrial Divisions, 1924.

	Prince Edward Island		Nova Scotia		New Brunswick		Maritime Provinces		Canada	
	Gross \$000	Net \$000	Gross \$000	Net \$000	Gross \$000	Net \$000	Gross \$000	Net \$000	Gross \$000	Net \$000
Agriculture.....	19,573	15,064	38,006	29,125	28,673	21,620	65,809	34,19	1,530,482	1,140,896
Forestry.....	837	769	11,972	10,074	43,147	30,498	55,956	41,341	21,49	433,817
Fisheries.....	1,624	1,202	11,907	8,777	6,288	5,384	19,819	15,363	7,98	56,015
Trapping.....	3	3	198	198	63	63	264	264	0,14	14,786
Mining.....	—	—	23,820	23,820	1,969	1,969	25,789	25,789	13,39	230,106
Electric power.....	137	129	2,352	1,871	1,559	1,231	4,048	3,231	1,68	95,170
Construction.....	238	154	5,073	3,459	4,323	2,808	9,634	6,421	3,33	287,688
Manufactures (a).....	3,721	1,439	64,573	25,642	67,456	26,952	135,750	54,033	16,08	2,695,053
Custom and repair.....	234	142	2,994	1,954	1,713	1,221	4,941	3,317	1,72	90,837
Total (a).....	24,378	18,138	145,356	96,071	124,450	78,298	297,163	192,507	100,00	4,930,417
										3,018,182
										100,00

(a) Manufactures includes certain duplication eliminated from total.  
 (b) Percentage adjusted.

1926, the index averaging 116.8 as compared with 111.9 in 1925, 113.6 in 1924, and 114.8 in 1923. The iron and steel industry, though quiet as compared with the earlier years of the record, has gained during 1926, the index averaging 58.0 in the January-September period, compared with 51.6 in the same period of 1925.

*Logging.*—Owing to the seasonal nature of logging operations, employment shows a low average; for the completed months of 1926, however, this was slightly higher than in the same three-quarters of 1925 or 1923, although at 24.7 it was lower than in 1924. On Sept. 1 the index was several points higher than in either of the two preceding years.

*Mining.*—The index number of employment in mining, at 99.4, was higher on Sept. 1 than in any month of last year. On the whole, however, it has averaged successively lower in each of the last four years, partly owing to the strikes that have affected the situation to a marked degree.

*Communication* during the years of the record has maintained a fairly even volume of employment, activity being rather greater in the autumn of this year than in 1925.

*Transportation.*—Transportation has been more active during 1926 than in preceding years, the index of employment for the nine elapsed months averaged 95.1, as compared with 87.9 for the same period in 1925, 84.7 in 1924 and 87.7 in 1923. At its peak in April of this year, the index was over six points higher than the previous high level for that date, in 1925.

*Construction and Maintenance.*—Employment in construction and maintenance has, on the whole, been higher during 1926 than in any other year of the record; the index averages 164.5 in the January-September period, while in the same months of 1925, 1924 and 1923 it was 163.9, 111.8 and 133.6, respectively. Highway work has been exceedingly brisk in both 1925 and 1926.

*Trade.*—So far this year, trade has been slightly less active, the index averaging 111.5, compared with 112.8 in the January-September period in 1925, 111.2 in 1924 and 115.6 in 1923.

TABLE II.—Index Numbers of Employment by Districts, 1921-1925

NOTE.—The number employed by the reporting firms in January, 1920, is taken as 100.

—	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia	Canada
RELATIVE WEIGHT OF EMPLOYMENT BY DISTRICTS AS AT SEPT. 1, 1926						
1921	8.3	28.7	40.4	13.1	9.5	100.0
Jan. 1.....	95.9	88.3	83.4	95.7	86.6	87.7
Feb. 1.....	96.3	90.4	88.1	93.7	87.2	90.1
Mar. 1.....	90.7	88.7	86.2	91.0	87.3	88.0
April 1.....	87.2	80.4	83.5	88.7	88.1	84.1
May 1.....	87.5	80.8	83.6	86.6	90.1	84.1
June 1.....	89.5	83.4	84.9	91.9	93.3	86.6
July 1.....	89.0	87.2	84.2	94.7	92.6	87.5
Aug. 1.....	91.2	87.8	85.0	97.5	96.3	88.9
Sept. 1.....	93.5	87.4	83.7	98.5	95.6	88.7
Oct. 1.....	93.1	89.2	85.9	100.0	98.4	90.2
Nov. 1.....	91.4	87.5	87.0	102.6	94.3	90.2
Dec. 1.....	89.5	83.7	85.9	95.6	88.9	87.2
Average.....	91.2	86.2	85.1	94.7	91.4	87.8
1922						
Jan. 1.....	78.1	74.4	78.3	82.8	79.9	77.9
Feb. 1.....	78.6	74.6	79.5	83.0	84.3	78.9
Mar. 1.....	80.7	80.6	81.7	84.4	85.3	81.9
April 1.....	80.6	77.5	81.1	82.1	85.9	80.8
May 1.....	83.0	81.2	82.4	85.4	91.3	83.3
June 1.....	87.4	88.1	87.8	92.8	96.6	89.2
July 1.....	92.6	88.0	89.2	99.7	99.2	91.1
Aug. 1.....	94.0	90.3	90.8	101.5	99.8	93.1
Sept. 1.....	90.3	91.6	91.9	101.2	102.0	93.7
Oct. 1.....	91.8	92.0	93.6	101.9	100.1	94.6
Nov. 1.....	91.7	92.7	94.9	105.0	100.2	95.8
Dec. 1.....	92.1	93.9	94.4	101.5	95.6	95.1
Average.....	86.7	85.4	87.1	93.4	93.3	87.9

TABLE II.—Index Numbers of Employment by Districts, 1921-1925—concluded

	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia	Canada
1923						
Jan. 1.....	90.8	83.5	85.6	90.0	88.3	86.3
Feb. 1.....	90.4	87.7	90.0	91.6	88.4	89.5
Mar. 1.....	90.7	87.9	90.8	88.9	92.0	89.9
April 1.....	90.5	85.5	88.4	83.5	92.8	87.6
May 1.....	90.0	90.3	91.6	90.4	97.5	91.4
June 1.....	93.9	99.1	96.8	95.5	100.4	97.3
July 1.....	101.0	100.5	97.2	101.4	103.9	99.5
Aug. 1.....	97.8	101.9	97.1	104.3	107.2	100.2
Sept. 1.....	101.4	100.1	98.1	101.1	106.6	100.0
Oct. 1.....	97.0	104.0	96.0	100.7	104.2	99.5
Nov. 1.....	95.2	103.2	96.0	99.2	102.8	98.8
Dec. 1.....	91.2	98.5	93.4	99.3	97.8	95.7
Average.....	94.2	95.2	93.4	95.5	98.5	94.6
1924						
Jan. 1.....	86.3	90.5	86.1	94.3	90.9	88.7
Feb. 1.....	83.2	92.8	90.0	92.1	92.7	90.6
Mar. 1.....	82.4	93.5	89.8	89.6	97.1	90.7
April 1.....	84.6	91.5	87.6	87.0	99.6	89.3
May 1.....	88.1	94.1	89.8	89.4	102.9	91.8
June 1.....	90.0	99.9	92.1	94.1	103.4	95.2
July 1.....	90.6	100.6	91.4	99.1	105.8	95.9
Aug. 1.....	90.2	98.7	90.3	98.4	107.1	94.7
Sept. 1.....	86.6	97.8	88.9	93.9	106.0	93.1
Oct. 1.....	88.3	97.6	91.6	91.4	104.0	93.9
Nov. 1.....	83.7	97.1	90.4	94.1	102.1	93.0
Dec. 1.....	79.3	95.3	88.4	91.8	100.0	90.8
Average.....	86.1	95.8	89.7	92.8	101.0	92.3
1925						
Jan. 1.....	78.5	85.0	81.4	88.1	92.9	83.9
Feb. 1.....	79.1	89.1	83.4	88.4	95.1	86.1
Mar. 1.....	81.7	89.6	85.0	85.0	98.1	87.0
April 1.....	83.4	89.8	84.9	84.1	100.1	87.2
May 1.....	86.6	94.2	87.7	88.0	105.1	90.8
June 1.....	90.3	100.6	89.8	93.1	106.5	94.5
July 1.....	99.4	101.1	91.8	95.9	108.0	96.8
Aug. 1.....	92.2	101.1	90.8	97.3	112.2	96.3
Sept. 1.....	88.4	101.3	92.7	96.0	114.2	96.6
Oct. 1.....	88.1	102.7	94.3	99.8	114.8	98.3
Nov. 1.....	85.5	101.1	93.7	99.1	111.5	97.1
Dec. 1.....	83.5	98.5	92.6	97.5	109.0	95.3
Average.....	86.4	96.2	89.0	92.7	105.6	92.5
1926						
Jan. 1.....	84.4	90.7	86.3	95.1	100.5	89.6
Feb. 1.....	85.1	92.6	88.1	90.7	103.6	90.7
Mar. 1.....	88.7	94.0	89.2	88.6	103.3	91.5
April 1.....	84.7	95.7	88.0	88.2	108.3	91.4
May 1.....	83.8	99.0	90.4	92.5	113.5	94.3
June 1.....	87.9	108.8	95.2	103.5	116.6	101.0
July 1.....	91.1	112.8	97.0	107.3	118.1	103.7
Aug. 1.....	94.5	113.5	96.7	106.5	120.8	104.2
Sept. 1.....	96.7	113.1	97.9	106.9	121.8	104.9

TABLE III.—Index Numbers of Employment in Canada and the Maritime Provinces, by Industries, 1921-1926  
(January, 1920=100)

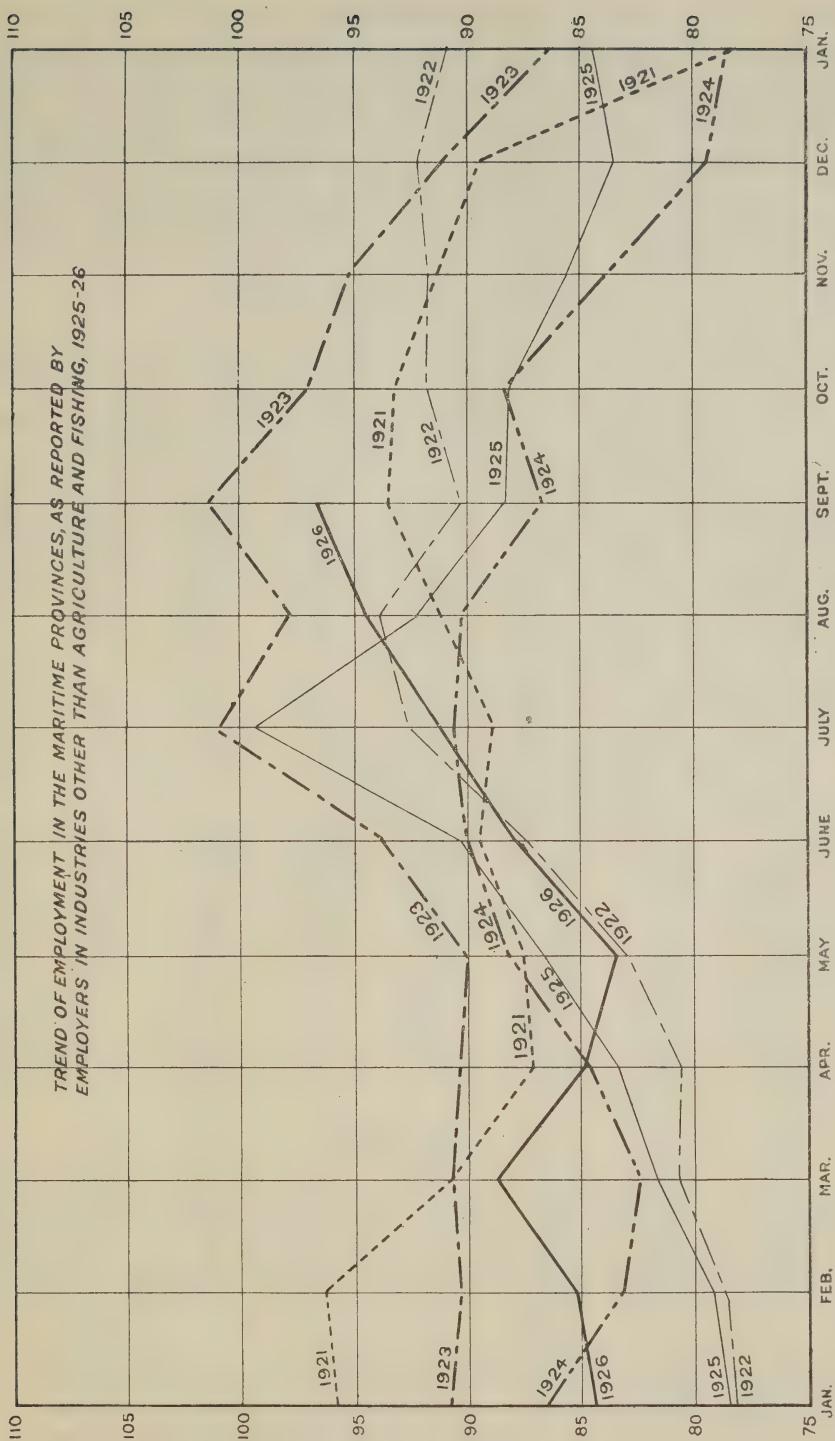
NOTE.—The relative weight columns show the proportion that the number of employees in the indicated industry is of the total number of employees reported in all industries by the firms making returns in the Maritime Provinces and Canada, respectively, on Sept. 1, 1926. The October, 1926, returns are not yet available.

Industries	1921							
	January 1		April 1		July 1		October 1	
	Maritime Provinces	Canada						
All manufacturing.....	86.0	78.4	83.1	80.7	83.5	80.9	86.0	81.3
Lumber Products.....	67.0	67.0	51.3	74.3	93.0	99.3	111.8	91.9
Pulp and Paper.....	164.2	101.8	82.6	91.6	101.5	90.9	82.5	86.7
Textile Products.....	86.8	69.2	77.7	79.8	87.1	80.1	88.0	84.8
Iron and Steel.....	88.8	81.9	89.4	78.2	76.7	70.1	75.8	70.0
Other Manufactures.....	70.7	75.7	86.2	82.3	87.8	84.9	104.5	85.8
Logging.....	50.1	88.6	2.4	44.5	1.7	35.4	2.9	48.1
Mining.....	107.2	100.3	94.8	88.0	103.9	92.2	106.6	96.4
Communication.....	102.1	105.4	98.1	101.8	105.1	107.4	107.0	105.1
Transportation.....	83.3	103.0	88.9	95.5	70.8	99.6	78.5	109.6
Construction and Maintenance.....	103.4	102.9	79.7	86.7	108.2	126.7	126.6	142.5
Services.....	92.4	94.5	103.9	97.8	154.3	108.0	132.9	104.5
Trade.....	153.5	100.4	124.7	92.5	122.7	92.7	119.2	92.4
ALL INDUSTRIES.....	95.9	87.7	87.2	84.1	89.0	87.5	93.1	90.2
1922								
All Manufacturing.....	66.1	68.7	70.3	78.0	89.2	84.2	87.0	86.7
Lumber Products.....	51.6	62.7	60.8	76.2	147.2	113.3	125.4	108.3
Pulp and Paper.....	101.5	85.9	107.6	90.1	120.8	97.3	112.3	96.9
Textile Products.....	87.9	80.1	74.8	90.3	98.5	88.0	96.8	88.7
Iron and Steel.....	55.7	49.6	55.7	64.9	62.1	65.6	65.8	92.1
Other Manufactures.....	70.8	78.3	79.5	81.3	95.8	87.9	91.4	90.2
Logging.....	9.0	59.5	10.2	27.2	4.2	31.4	0.5	42.1
Mining.....	92.0	93.0	98.0	88.9	99.0	94.4	104.5	101.1
Communication.....	97.5	101.1	90.8	98.2	88.2	100.6	89.9	102.8
Transportation.....	88.6	99.2	91.8	96.8	82.6	109.2	78.5	114.0
Construction and Maintenance.....	86.6	92.4	72.0	81.4	159.2	157.4	164.0	166.2
Services.....	82.8	92.9	91.2	94.6	132.0	104.4	109.7	102.0
Trade.....	127.3	96.9	114.5	88.6	113.5	90.7	113.2	91.9
ALL INDUSTRIES.....	78.1	77.9	80.6	80.8	92.6	91.1	91.8	94.6
1923								
All Manufacturing.....	84.0	78.1	82.3	85.6	99.6	93.6	90.8	91.8
Lumber Products.....	77.4	80.1	75.6	88.3	150.9	121.0	134.1	116.4
Pulp and Paper.....	109.4	95.4	114.6	97.4	119.0	104.9	116.1	104.7
Textile Products.....	101.5	84.6	101.5	91.1	100.6	87.3	88.0	86.9
Iron and Steel.....	83.2	64.7	77.4	77.2	80.8	85.0	75.0	81.3
Other Manufactures.....	74.2	81.7	76.8	86.5	94.8	93.0	86.2	92.5
Logging.....	24.2	87.0	21.2	57.8	46.3	48.4	13.6	51.7
Mining.....	106.4	100.8	103.5	97.0	110.9	101.6	109.7	104.9
Communication.....	86.8	97.4	84.4	98.0	88.3	103.4	94.7	106.6
Transportation.....	98.7	104.8	99.1	100.2	73.2	112.2	71.3	116.2
Construction and Maintenance.....	89.6	96.0	90.8	85.2	182.5	169.1	210.2	171.8
Services.....	85.7	92.8	93.1	94.9	128.5	115.1	94.3	113.7
Trade.....	118.9	98.2	115.8	90.2	118.0	92.3	117.4	93.2
ALL INDUSTRIES.....	90.8	86.3	90.5	87.6	101.0	99.5	97.0	99.5
1924								
All Manufacturing.....	74.5	80.1	75.3	86.5	89.2	87.7	80.6	85.7
Lumber Products.....	60.7	74.8	59.9	83.8	140.7	111.9	133.9	107.9
Pulp and Paper.....	108.1	98.4	110.8	98.8	120.2	99.9	102.0	101.1
Textile Products.....	94.3	80.9	97.4	86.9	84.1	81.1	95.7	85.4
Iron and Steel.....	68.3	72.6	69.4	82.0	66.6	76.0	50.4	66.6
Other Manufactures.....	75.7	82.8	75.1	87.5	93.3	90.6	88.0	92.3
Logging.....	75.4	92.1	21.7	54.2	22.6	43.1	27.4	53.4
Mining.....	95.5	100.5	98.5	99.5	103.5	99.9	95.8	99.0
Communication.....	95.5	104.2	87.5	106.0	93.0	111.7	93.5	111.2
Transportation.....	96.0	107.3	101.4	103.7	68.8	110.0	70.1	109.0
Construction and Maintenance.....	92.6	98.8	75.1	91.4	145.3	175.8	189.9	157.5
Services.....	89.2	106.6	93.6	107.9	137.0	122.5	93.0	115.0
Trade.....	119.0	99.4	110.1	91.0	107.4	92.1	112.6	93.1
ALL INDUSTRIES.....	86.3	88.7	84.6	89.3	90.6	95.9	88.3	93.9

TABLE III.—Index Numbers of Employment in Canada and the Maritime Provinces, by Industries, 1921-1926—Concluded.

Industries	1925							
	January 1		April 1		July 1		October 1	
	Maritime Provinces	Canada						
All Manufacturing.....	59.6	75.5	72.1	84.3	85.3	89.1	82.7	91.3
Lumber Products.....	59.7	70.4	65.5	83.3	138.7	118.2	130.8	113.4
Pulp and Paper.....	96.8	95.6	108.8	98.0	122.1	102.1	113.0	102.8
Textile Products.....	78.8	80.1	97.1	90.2	96.0	87.7	91.0	89.6
Iron and Steel.....	41.9	60.0	59.3	74.6	53.2	72.9	56.3	74.5
Other Manufactures.....	71.9	83.3	76.8	86.8	94.2	92.9	90.7	97.8
Logging.....	48.8	83.4	21.1	47.5	14.1	38.2	24.7	49.5
Mining.....	94.5	97.1	93.3	94.2	97.2	97.2	91.7	96.2
Communication.....	88.9	108.9	86.8	107.6	89.7	112.6	88.2	114.2
Transportation.....	98.6	99.0	107.2	98.5	69.1	106.2	71.2	111.3
Construction and Maintenance.....	83.7	93.3	77.0	96.8	351.5	187.5	182.5	169.7
Services.....	90.2	107.1	89.7	107.7	116.2	122.9	107.3	120.5
Trade.....	116.9	96.3	112.9	93.6	111.6	93.8	113.1	96.7
ALL INDUSTRIES.....	78.5	83.9	83.4	87.2	99.4	96.8	88.1	98.3

Industries	1926									
	January		April 1		July 1		September 1		Relative Weight	
	Maritime Provinces	Canada								
All Manufacturing.....	70.2	83.2	73.5	89.3	84.4	95.3	85.2	96.9	38.1	55.3
Lumber Products.....	69.5	77.7	64.3	87.7	143.6	118.1	142.8	119.5	8.4	6.8
Pulp and Paper.....	106.5	100.8	116.1	103.3	124.8	110.0	123.7	113.8	3.6	6.7
Textile Products.....	88.4	87.7	97.7	94.0	91.4	92.2	95.2	92.5	5.0	8.3
Iron and Steel.....	57.6	70.0	61.4	81.1	53.4	83.5	58.2	82.4	11.4	14.7
Other Manufactures.....	74.9	88.8	76.8	91.1	94.0	96.6	87.8	100.8	9.7	36.5
Logging.....	30.0	71.6	12.6	43.9	26.9	44.3	12.4	37.0	0.7	1.7
Mining.....	94.0	96.5	79.0	88.4	96.5	95.4	99.4	97.2	21.8	5.1
Communication.....	84.7	111.3	83.4	110.7	89.7	118.2	92.6	120.1	3.0	2.9
Transportation.....	107.1	103.9	113.5	101.2	70.1	111.4	73.0	113.4	13.2	13.3
Construction and Maintenance.....	97.4	103.3	127.0	113.7	205.8	216.8	278.9	217.6	17.1	13.0
Services.....	90.0	107.8	92.1	112.8	126.4	126.0	146.4	132.2	0.9	1.9
Trade.....	114.1	102.1	111.4	96.2	110.7	98.4	110.0	98.9	5.2	6.8
ALL INDUSTRIES.....	84.4	89.6	84.7	91.4	91.1	103.7	96.7	104.9	100.0	100.0



## Part 2. Agriculture

*General Review.*—A general view of present-day agriculture in the Maritime Provinces is presented in the accompanying statement of production by items, with totals for the Maritimes and Canada, during the past two years (Table I). It will be seen that field crops and dairy production are the largest items, with fruits and vegetables third and animal husbandry fourth. Agricultural production in the Maritimes in these years represented 5.77 and 5.99 per cent respectively of the total similar production of Canada. A more detailed presentation, with the leading historical data in each case, is given in the rest of this section under the headings "Field Crops," "Live Stock," "Dairying," "Fruit Growing" and "Fur Farming", respectively.

TABLE I.—Agricultural Production.

(000's omitted)

—	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritime Provinces	Canada
1924	\$	\$	\$	\$	\$
Field crops.....	11,990	16,786	16,080	44,856	995,236
Farm animals.....	864	1,956	1,632	4,452	98,637
Wool.....	119	363	201	683	3,771
Dairy products.....	3,073	8,979	7,120	19,172	218,430
Fruits and vegetables.....	250	7,142	1,224	8,616	44,848
Poultry and eggs.....	1,029	1,051	1,119	3,199	60,836
Fur farming.....	1,475	185	435	2,095	3,218
Maple products.....	—	43	44	87	5,991
Tobacco.....	—	—	—	—	4,359
Flax fibre.....	—	—	—	—	712
Clover and grass seed.....	39	29	36	104	3,300
Honey.....	—	—	22	22	4,339
Total.....	18,839	36,534	27,913	83,286	1,443,677
1925					
Field crops.....	15,417	18,885	25,681	59,983	1,153,395
Farm animals.....	1,908	2,994	2,682	7,584	151,424
Wool.....	127	385	219	731	3,958
Dairy products.....	3,406	10,049	7,934	21,389	253,269
Fruits and vegetables.....	250	5,476	1,203	6,929	52,667
Poultry and eggs.....	1,144	1,053	1,204	3,401	69,675
Fur farming.....	1,600	200	500	2,300	3,600
Maple products.....	—	54	30	84	5,133
Tobacco.....	—	—	—	—	7,002
Flax fibre.....	—	—	—	—	750
Clover and grass seed.....	17	24	33	74	3,594
Honey.....	—	—	20	20	4,100
Total.....	23,869	39,120	39,506	102,495	1,708,567

## A. FIELD CROPS

Oats comprise the grain crop most extensively grown in the Maritime Provinces, quantities and values in 1925 by provinces being as follows: Prince Edward Island, 5,519,000 bushels valued at \$2,468,000; Nova Scotia, 3,878,000 bushels valued at \$2,911,000; New Brunswick, 6,814,000 bushels valued at \$4,088,000; total 16,211,000 bushels valued at \$9,467,000. Buckwheat is also an important crop in New Brunswick, 1,153,000 bushels valued at \$934,000 being produced in 1925.

The potato is the mostly highly specialized of the field crops, the annual value of the crop in 1925 being estimated at \$18,853,000. The cool moist climate extends the period of growth; hence the firmness, full starch content, good keeping quality and pleasant flavour of the product, whose excellence has gained a high reputation in the large consuming centres of Canada and the New England States, and also in the West Indies, where it finds a ready market. Maritime potatoes are also increasingly in demand for seed purposes in Ontario and parts of the United

States where they have been found to give superior yields. The average yield per acre in Nova Scotia and New Brunswick frequently runs to 120 cwt. (200 bushels) and higher, ranking second only to that of the State of Maine on the American Continent. In the chief producing sections of New Brunswick, the counties of Carleton and Victoria, crops of 155 to 210 cwt., or 275 to 350 bushels per acre, are commonly secured by the application of suitable culture. The production of potatoes, with values, in 1925 was: 3,859,000 cwt. (\$6,753,000) in Prince Edward Island; 2,570,000 cwt. (\$4,575,000) in Nova Scotia; and 4,232,000 cwt. (\$7,525,000) in New Brunswick; making a total of 10,661,000 cwt. (\$18,853,000) for the three Provinces.

The same climatic conditions which are so favourable to the production of roots and vegetables are equally favourable to the growth of clover and grasses. Consequently there is an abundance of pasture, and a large production of hay, a considerable quantity of which is baled and exported. Quantities and values in 1925 were as follows: Prince Edward Island, 366,000 tons (\$3,755,000); Nova Scotia, 906,000 tons (\$8,365,000); New Brunswick, 954,000 tons (\$10,899,000); making 2,226,000 tons valued at \$23,019,000 in all.

A review of recent field crops in the Maritime Provinces is presented in Tables II, III and IV whilst the historical background is available in Table V. It will be noticed that the yield of oats, the principal grain crop in the Maritimes ever since Confederation, has increased almost steadily to about twice the amount produced in 1871. The production of other grains, however, has remained much the same since 1871, buckwheat, mixed grains and wheat following oats in order of importance. The yields of root crops have also been more or less stable till 1925, when some decrease is shown. The general tendency in the production of field crops seems to be towards stabilization, a decrease in one year being often followed by an increase in the next.

TABLE II.—Quantity and Value of Field Crops, 1925.

(000's omitted)

Item	Quantity				
	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
Wheat.....Bush.	554	170	226	950	411,376
Oats....."	5,519	3,878	6,814	16,211	513,384
Barley....."	124	177	152	453	112,668
Rye....."	—	2	4	6	13,689
Peas....."	4	14	24	42	3,411
Beans....."	—	32	23	55	1,501
Buckwheat....."	61	160	1,153	1,374	10,449
Mixed Grain....."	749	131	92	972	34,301
Potatoes.....Cwt.	3,859	2,570	4,232	10,661	42,380
Turnips and Mangolds....."	2,531	3,272	2,140	7,943	36,868
Hay and Clover.....Tons	366	906	954	2,226	16,141
Fodder Corn....."	7	11	35	53	5,429
Value					
Wheat.....\$	798	292	415	1,505	459,149
Oats.....\$	2,468	2,911	4,088	9,467	201,051
Barley.....\$	110	197	114	421	57,820
Rye.....\$	—	3	5	8	9,722
Peas.....\$	6	32	66	104	5,616
Beans.....\$	—	114	64	178	3,877
Buckwheat.....\$	52	160	934	1,146	8,881
Mixed Grain.....\$	438	131	83	652	21,901
Potatoes.....\$	6,753	4,575	7,525	18,853	83,615
Turnips and Mangolds.....\$	1,012	2,061	1,348	4,421	20,964
Hay and Clover.....\$	3,755	8,365	10,899	23,019	164,585
Fodder Corn.....\$	25	44	140	209	23,260
All Field Crops.....\$	15,417	18,885	25,681	59,983	(a) 1,153,395

(a) Includes some items not enumerated.

TABLE III.—Quantity and Value of Field Crops, 1924.  
(000's omitted)

Item		Quantity				
		Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
Wheat.....	Bush.	535	168	205	908	262,097
Oats.....	"	5,065	3,856	5,902	14,823	405,976
Barley.....	"	138	186	150	474	88,807
Rye.....	"	—	4	7	11	13,751
Peas.....	"	4	10	21	35	3,240
Beans.....	"	—	30	24	54	1,194
Buckwheat.....	"	49	168	1,004	1,221	11,412
Mixed Grain.....	"	766	114	76	956	31,995
Potatoes.....	Cwt.	5,776	3,112	7,203	16,091	56,648
Turnips and Mangolds.....	"	2,336	2,963	2,280	7,579	40,597
Hay and Clover.....	Tons	372	808	595	1,775	14,960
Fodder Corn.....	"	4	7	22	33	5,741
					Value	
Wheat.....	\$	850	271	364	1,485	320,362
Oats.....	\$	3,004	2,988	3,751	9,743	200,688
Barley.....	\$	135	195	150	480	61,760
Rye.....	\$	—	4	11	15	13,679
Peas.....	\$	8	22	46	76	5,676
Beans.....	\$	—	112	85	197	3,307
Buckwheat.....	\$	49	186	771	1,006	10,149
Mixed Grain.....	\$	574	128	57	759	22,626
Potatoes.....	\$	2,558	1,867	3,025	7,450	47,956
Turnips and Mangolds.....	\$	701	1,482	570	2,753	17,884
Hay and Clover.....	\$	4,090	9,494	7,140	20,724	165,587
Fodder Corn.....	\$	21	37	110	168	29,380
All Field Crops.....	\$	11,990	16,786	16,080	44,856	(a) 995,236

(a) Includes some items not enumerated.

TABLE IV.—Average Quantity and Value of Field Crops, 1918-22.  
(000's omitted)

		Quantity				
		Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
Wheat.....	Bush.	589	470	570	1,629	269,234
Oats.....	"	5,725	4,847	8,443	19,015	453,776
Barley.....	"	147	295	196	638	65,712
Rye.....	"	—	11	7	18	16,769
Peas.....	"	6	24	46	76	3,438
Beans.....	"	—	87	71	158	1,722
Buckwheat.....	"	90	315	1,476	1,881	9,770
Mixed Grain.....	"	629	178	126	933	29,183
Potatoes.....	Cwt.	3,175	5,106	7,662	15,943	67,681
Turnips and Mangolds.....	"	2,553	4,883	3,508	10,944	51,848
Hay and Clover.....	Tons	332	979	954	2,265	14,063
Fodder Corn.....	"	4	20	31	55	5,523
				Value		
Wheat.....	\$	1,078	1,046	1,247	3,371	369,822
Oats.....	\$	3,691	4,549	6,333	14,573	252,084
Barley.....	\$	168	441	251	860	52,223
Rye.....	\$	—	18	10	28	15,231
Peas.....	\$	15	83	136	234	8,486
Beans.....	\$	—	521	362	883	7,457
Buckwheat.....	\$	109	414	1,934	2,457	12,158
Mixed Grain.....	\$	587	221	138	946	27,628
Potatoes.....	\$	3,051	7,923	10,218	21,192	96,680
Turnips and Mangolds.....	\$	1,282	4,833	2,778	8,893	41,186
Hay and Clover.....	\$	6,443	21,253	18,829	46,525	278,174
Fodder Corn.....	\$	29	176	297	502	36,280
All Field Crops.....	\$	16,453	41,478	42,533	100,464	(a) 1,248,686

(a) Includes some items not enumerated.

TABLE V.—Production of Field Crops as shown by Census Returns 1871-1921  
(000's omitted)

		Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
1871						
Wheat.....	bush.	269	228	205	702	16,724
Oats.....	"	3,129	2,190	3,044	8,363	42,480
Barley.....	"	176	296	71	543	11,496
Rye.....	"	—	34	24	58	1,064
Peas.....	"	1	20	27	48	9,906
Beans.....	"	1	15	18	34	221
Buckwheat.....	"	75	234	1,231	1,540	3,726
Corn.....	"	2	23	28	53	3,803
Potatoes.....	"	3,376	5,561	6,562	15,499	47,330
Turnips.....	"	395	468	604	1,467	24,339
Other Roots.....	"	3	151	98	252	3,553
Hay.....	tons	68	444	345	857	3,819
1881						
Wheat.....	bush.	547	529	522	1,598	32,350
Oats.....	"	3,538	1,873	3,298	8,709	70,493
Barley.....	"	119	229	84	432	16,845
Rye.....	"	—	48	18	66	2,097
Peas and beans.....	"	3	37	43	83	13,750
Buckwheat.....	"	90	340	1,587	2,017	4,901
Corn.....	"	3	14	18	35	9,025
Potatoes.....	"	6,042	7,378	6,961	20,381	55,268
Turnips.....	"	1,198	1,007	990	3,195	39,059
Other roots.....	"	43	326	159	528	9,192
Hay.....	tons	144	598	414	1,156	5,056
1891						
Wheat.....	bush.	613	166	210	989	42,145
Oats.....	"	2,923	1,560	3,025	7,508	82,515
Barley.....	"	148	228	101	477	17,148
Rye.....	"	—	24	6	30	1,328
Peas.....	"	5	20	21	46	14,718
Beans.....	"	2	25	20	47	797
Buckwheat.....	"	84	184	1,137	1,405	4,886
Corn.....	"	3	17	21	41	10,676
Potatoes.....	"	7,071	5,114	4,828	17,013	52,654
Turnips and other roots.....	"	2,005	1,349	974	4,328	49,556
Hay.....	tons	133	632	476	1,241	7,694
1901						
Wheat.....	bush.	738	248	381	1,367	55,563
Oats.....	"	4,558	2,342	4,812	11,712	151,414
Barley.....	"	105	180	99	384	22,216
Rye.....	"	—	16	3	19	2,315
Peas.....	"	2	3	17	22	12,346
Beans.....	"	—	15	13	28	857
Buckwheat.....	"	50	196	1,390	1,636	4,543
Corn.....	"	1	9	12	22	25,753
Mixed grains.....	"	226	91	28	345	7,260
Potatoes.....	"	4,960	4,270	4,588	13,818	53,842
Other field roots.....	"	3,925	2,058	2,061	8,044	75,784
Hay.....	tons	168	647	511	1,326	7,824
1911						
Wheat.....	bush.	502	224	204	930	132,078
Oats.....	"	5,213	2,974	5,539	13,726	245,393
Barley.....	"	114	142	57	313	28,848
Rye.....	"	—	5	—	5	1,542
Peas.....	"	1	2	7	10	4,789
Beans.....	"	—	12	5	17	826
Buckwheat.....	"	44	206	1,151	1,401	7,103
Corn.....	"	1	3	2	6	14,418
Mixed grain.....	"	227	78	20	325	13,086
Potatoes.....	"	4,203	3,531	5,219	12,953	55,461
Turnips.....	"	2,884	3,114	2,457	8,455	47,371
Other field roots.....	tons	3	13	7	23	1,179
Hay.....	"	256	724	669	1,649	10,406
Corn for forage.....	"	2	5	2	9	2,705
Other forage crops.....	"	2	5	4	11	458

TABLE V.—Production of Field Crops as shown by Census Returns 1871-1921—concluded  
(000's omitted)

—	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
1921					
Wheat.....	bush.	360	222	225	807
Oats.....	"	3,687	2,732	5,431	11,850
Barley.....	"	80	152	98	330
Rye.....	"	5	5	5	15
Peas.....	"	—	1	5	6
Beans.....	"	1	12	8	21
Buckwheat.....	"	26	90	726	842
Corn.....	"	1	2	7	10
Mixed grain.....	"	258	64	8	330
Potatoes.....	"	4,832	4,390	8,411	17,633
Turnips.....	"	2,769	2,979	2,575	8,323
Other field roots.....	tons	5	8	2	15
Cultivated hay.....	"	212	603	581	1,396
Prairie hay.....	"	—	17	5	22
Corn for forage.....	"	1	2	1	4
Grains cut for hay.....	"	2	16	6	24
Other forage crops.....	"	1	3	1	5
					273

### B. LIVE STOCK

The history of the live stock industry in the Maritime Provinces up to the present is shown in outline in Table VI. It will be seen that there has been little final change in the number of live stock on farms, although considerable fluctuations have taken place during the period 1871-1925.

TABLE VI.—Live Stock on Farms as shown by Census Returns 1871-1921.

—	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
1871					
Horses.....		41,925	36,322	119,694	643,171
Colts and fillies.....	25,329	7,654	8,464	—	193,572
Working oxen.....	—	32,214	11,132	—	139,635
Milch cows.....	—	122,688	83,220	—	1,251,209
Other horned cattle.....	62,984	119,065	69,335	457,292	1,233,446
Sheep.....	147,364	398,377	234,418	780,159	3,155,509
Swine.....	52,514	54,162	65,805	172,481	1,366,083
Poultry.....		Not available			
1881					
Horses.....	25,182	46,044	43,957	115,183	857,855
Colts and fillies.....	6,153	11,123	9,018	26,294	201,503
Working oxen.....	84	33,275	8,812	42,171	132,593
Milch cows.....	45,895	137,639	103,965	287,499	1,595,800
Other horned cattle.....	44,743	154,689	99,788	299,220	1,786,596
Sheep.....	166,496	377,801	221,163	765,460	3,048,678
Swine.....	40,181	47,256	53,087	140,624	1,207,619
Poultry.....		Not available			
1891					
Horses.....	25,674	52,210	46,115	123,999	1,068,584
Colts and fillies.....	11,718	12,837	13,658	38,213	401,988
Working oxen.....	116	28,424	7,510	36,050	123,563
Milch cows.....	45,849	141,684	106,649	294,182	1,857,112
Other horned cattle.....	45,730	154,664	90,533	290,927	2,139,911
Sheep.....	147,372	331,492	182,941	661,805	2,563,781
Swine.....	42,629	48,048	50,945	141,622	1,733,850
Poultry.....	534,962	792,184	662,433	1,989,579	14,105,102

TABLE VI.—Live Stock on Farms as shown by Census Returns 1871-1921—concluded

—	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
1901					
Horses, 3 yrs. and over.....	26,555	48,489	48,481	123,525	1,150,938
" under 3 yrs.....	6,803	6,685	7,396	20,884	259,577
Milch cows.....	55,694	127,945	105,992	289,631	2,292,120
Other horned cattle.....	56,118	173,757	114,938	344,813	3,080,384
Sheep.....	125,175	278,549	180,626	584,350	2,465,565
Swine.....	47,624	42,015	50,243	139,882	2,292,675
Poultry.....	581,790	798,145	714,131	2,094,066	17,922,658
1911					
Horses, 3 yrs and over.....	26,238	52,132	54,413	132,783	1,991,841
" under 3 yrs.....	9,697	9,288	10,996	29,981	607,117
Milch cows.....	52,109	129,274	108,557	289,940	2,595,255
Other horned cattle.....	61,334	158,218	113,671	333,223	3,930,828
Sheep.....	91,232	221,074	158,316	470,622	2,174,300
Swine.....	56,377	63,380	87,393	207,150	3,634,778
Poultry.....	760,939	954,251	982,654	2,697,844	31,793,261
1921					
Horses.....	32,026	54,439	62,448	148,913	3,451,752
Milch cows.....	48,114	119,733	106,486	274,333	3,228,633
Other cattle.....	61,834	146,630	123,826	332,290	5,140,856
Sheep.....	105,884	271,742	187,524	565,150	3,200,467
Swine.....	39,172	47,457	75,905	162,534	3,324,291
Poultry.....	869,064	1,196,434	1,164,164	3,229,662	50,325,248
1925 (Estimates)					
Horses.....	32,752	53,352	50,782	136,886	3,554,041
Milch cows.....	56,295	137,273	111,225	304,793	3,830,175
Other cattle.....	56,899	154,699	105,263	316,861	5,477,123
Sheep.....	87,219	273,499	151,349	512,067	2,755,556
Swine.....	52,114	44,670	60,376	157,160	4,426,148
Poultry.....	941,490	860,225	951,063	2,752,778	48,133,969

The number of horses on farms was reported as 119,694 in 1871; the number increased to 142,477 in 1881 and to 162,212 in 1891. A decrease however is shown in the next ten year period to 144,409 in 1901, rising again to 162,764 in 1911. In 1921 a decrease is again recorded, the number having fallen to 148,913. The annual returns show this decrease has been maintained, the number reported for 1925 being 136,886.

The number of milch cows in Nova Scotia and New Brunswick in 1871 were 122,688 and 83,220 respectively. At this time milch cows in Prince Edward Island were not shown separately, but total cattle of all kinds in Prince Edward Island in the census of 1871 numbered 62,984. In the census of 1881 the number of milch cows in Prince Edward Island was 45,895, placing the total number of milch cows in 1871 in the three provinces at 253,000. The comparative figure for 1920 as shown in the census of 1921 was 274,333; in the meantime however the number of milch cows on farms increased, the number being 274,182 in 1891. The figures for 1901 and 1911 were 289,631 and 289,940 respectively. The estimated number for 1925 was 304,793. It must be remembered, however, that the dairying industry in the Maritime Provinces, particularly in Nova Scotia, has developed considerably during the last few years, *e.g.*, the production of creamery butter in Nova Scotia has increased from 1,240,485 lbs., in 1915 to 4,521,814 pounds in 1925.

A considerable decrease has taken place in the number of sheep on farms. This has been common throughout the entire period from 1871 to 1911 and is shown by the following figures: 1871, number of sheep on farms 780,159; 1881, 765,460; 1891, 661,805; 1901, 584,350; 1911, 470,622; during the decade 1911 to 1921 the number of sheep on farms increased to 565,150, but fell off again to 512,067 in 1925.

Similarly in the case of swine, the number reported in 1871 was 172,481, as compared with 162,534 in 1921. During the decade from 1871 to 1881 a considerable reduction in the number of swine on farms apparently took place, the number for 1881 being reported at 140,524. The 1891 and 1901 figures show a maintenance of the 1881 position, the number of swine on farms being shown at 141,622 in 1891 and 139,882 in 1901. In the following decade, however, the number increased considerably, to 207,150, dropping back again to 162,534 in 1921. From an examination of the estimated number of animals on farms as shown by the June surveys it would appear that with the discontinuance of the export demand of bacon and other cured pork products overseas the number of swine on farms was not maintained. These figures show that the peak was apparently reached in 1919. The number of swine estimated on farms in the Maritime Provinces in 1925 was 157,160.

### C. DAIRYING

Dairying has been carried on in the Maritime Provinces for many years. Natural conditions are decidedly favourable, inasmuch as soil and climate produce all kinds of fodder crops in large quantities. In the early years butter and cheese making was largely carried on on the farm. According to the census of 1851, 3,050,939 lb. of dairy butter were produced in New Brunswick and 3,613,890 lb. in Nova Scotia. Nova Scotia also made 652,069 lb. of homemade cheese. The production as shown in the census records for later years is given in the following table.

TABLE VII.—Production of Dairy Butter and Home-made Cheese in the Maritime Provinces as shown by Census Returns, 1861-1921.

#### DAIRY BUTTER—POUNDS

Census of	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritime Provinces
1861.....	711,487	4,532,711	4,591,477	9,835,675
1871.....	981,939	7,161,867	5,115,947	13,259,753
1881.....	1,688,690	7,465,285	6,527,176	15,731,151
1891.....	1,969,213	9,011,118	7,798,268	18,778,599
1901.....	1,398,112	9,060,742	7,842,533	18,301,387
1911.....	2,309,691	10,978,911	9,053,394	22,341,996
1921.....	2,087,739	8,746,067	8,387,606	19,221,412

#### HOME-MADE CHEESE—POUNDS

1861.....	109,133	901,296	218,067	1,228,496
1871.....	155,527	884,853	154,758	1,195,138
1881.....	176,273	501,655	172,144	870,072
1891.....	123,708	589,363	39,716	752,787
1901.....		Not given		
1911.....	9,422	199,250	3,567	212,239
1921.....	986	89,777	9,521	100,284

It will be seen that the farm production of butter increased steadily up to the census of 1911 when a total of 22,341,996 lb. was produced. The census of 1921 however, shows a reduction of this total to 19,221,412 lb. The making of cheese on the farms in the meantime declined to very small proportions.

During the decade 1911 to 1921 the development of dairy factories in the Maritime Provinces was very marked. The production of creamery butter and factory cheese for the years 1915 and 1920 and later years is shown in the following statement, added to which is a table giving a more detailed view of this industry at the present time.

TABLE VIII.—Recent Dairy Factory Production.

## CREAMERY BUTTER—POUNDS

	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritime Provinces
1915.....	539,516	1,240,483	776,416	2,556,415
1920.....	1,166,032	2,503,188	1,053,649	4,722,869
1921.....	1,109,546	3,094,768	1,152,168	5,356,482
1922.....	1,262,006	3,329,426	1,224,930	5,816,362
1923.....	1,537,437	3,550,666	1,231,471	6,319,574
1924.....	1,560,250	4,139,469	1,225,615	6,925,334
1925.....	1,724,283	4,530,028	1,279,417	7,533,728

## FACTORY CHEESE—POUNDS

	2,260,000	125,580	1,165,651	3,551,231
1915.....	2,081,277	52,638	1,235,008	3,368,923
1920.....	1,681,779	29,440	1,100,382	2,811,601
1921.....	1,752,233	31,820	926,052	2,710,105
1922.....	1,811,537	34,332	825,369	2,671,238
1923.....	2,048,937	34,475	942,220	3,025,632
1924.....	2,001,242	34,856	1,130,773	3,166,871

TABLE IX.—Principal Statistics of Dairy Factories in the Maritime Provinces, with comparative figures for all Canada.

	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
1924					
Establishments.....	No. 33	29	34	96	2,933
Capital.....	\$ 189,359	664,007	611,958	1,465,324	41,585,586
Employees.....	No. 95	196	147	438	10,818
Salaries and wages.....	\$ 55,113	169,164	142,905	367,182	10,857,300
Cost of materials.....	\$ 778,283	1,555,602	809,868	3,143,753	92,492,423
Quantity of products—					
Butter.....	lb. 1,560,250	4,139,469	1,225,615	6,925,334	178,893,937
Cheese.....	lb. 2,048,937	34,475	942,220	3,025,632	149,707,530
Value of products—					
Butter.....	\$ 567,986	1,502,793	461,936	2,532,715	60,494,826
Cheese.....	\$ 322,597	5,939	155,003	483,539	24,201,923
Other.....	\$ 61,346	1,014,770	563,015	1,639,131	37,330,432
Total.....	\$ 951,929	2,523,502	1,179,954	4,655,385	122,027,181
1925					
Establishments.....	No. 34	28	37	99	3,012
Capital.....	\$ 216,197	732,448	683,497	1,632,142	44,307,558
Employees.....	No. 98	224	159	481	11,334
Salaries and wages.....	\$ 62,413	213,710	163,300	439,423	11,518,198
Cost of materials.....	\$ 917,056	1,860,602	1,027,812	3,805,470	* 106,985,278
Quantity of products—					
Butter.....	lb. 1,724,283	4,530,028	1,279,417	7,533,728	* 183,524,314
Cheese.....	lb. 2,001,242	34,856	1,130,773	3,166,871	* 177,139,113
Value of products—					
Butter.....	\$ 632,547	1,782,414	469,153	2,884,114	* 63,658,167
Cheese.....	\$ 413,545	7,435	230,434	651,414	* 36,671,556
Other.....	\$ 61,711	1,088,156	743,026	1,892,893	* 37,617,576
Totals.....	\$ 1,107,803	2,878,005	1,442,613	5,428,421	* 137,847,299

\* Subject to revision.

## D. FRUIT GROWING

Apple growing in Nova Scotia is a well known and stable industry. The Annapolis Valley and the Cornwallis Valley are considered the most suitable region, but other parts of the Province are also well adapted to this industry. The danger in certain districts lies in late spring frosts and in severe winters.

The French introduced the apple in 1633. From 300,000 barrels in 1880, the pack increased to 1,821,064 barrels valued at \$8,012,682 in 1923, but it has fallen off during the past two years. (see Table X). The principal market is in Great Britain, but considerable quantities are also shipped to the United States and Newfoundland.

TABLE X.—Survey of Apple Production in Maritime Provinces and Canada, 1870-1925.

Year		Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
1870.....	bbl.	Not given	114,171	42,132	156,303	2,121,772
1880.....	"	10,500	302,840	77,032	390,372	4,459,218
1890.....	"	17,339	350,531	86,538	454,408	2,506,638
1900.....	"	51,877	659,578	163,478	874,933	5,796,595
1910.....	"	53,458	555,659	90,961	700,078	3,539,555
1920.....	"	54,707	1,414,655	122,438	1,591,800	5,497,143
	\$	145,939	3,860,142	367,015	4,373,096	14,150,565
1921.....	bbl.	Not given	2,036,065	138,589	2,174,654	5,367,700
	\$	"	11,096,554	692,945	11,789,499	35,821,090
1922.....	bbl.	"	1,891,852	173,236	2,065,088	5,048,405
	\$	"	7,851,185	779,562	8,630,747	24,692,182
1923.....	bbl.	"	1,821,064	69,292	1,890,356	4,493,183
	\$	"	8,012,682	329,137	8,341,819	24,489,350
1924.....	bbl.	"	1,274,742	86,615	1,361,357	3,375,084
	\$	"	6,118,761	454,728	6,573,489	19,747,772
1925 (a).....	bbl.	"	956,056	69,292	1,025,348	3,580,770
	\$	"	4,302,252	367,247	4,669,499	20,057,417

(a) Preliminary figures.

The values of apples (green or ripe) exported through the Port of Halifax during the fiscal years 1901-2 to 1925-6 inclusive were as follows:

Fiscal year Ended June 30	Value of apples exported via Halifax
1901-2.....	\$ 819,241
1902-3.....	187,886
1903-4.....	1,265,392
1904-5.....	942,364
1905-6.....	882,058
Ended March 31	
1906-7 (nine months).....	747,288
1907-8.....	894,583
1908-9.....	1,190,431
1909-10.....	1,359,454
1910-11.....	871,112
1911-12.....	3,408,929
1912-13.....	2,350,843
1913-14.....	2,020,152
1914-15.....	1,472,612
1915-16.....	1,084,189
1916-17.....	1,374,760
1917-18.....	124,031
1918-19.....	1,125,679
1919-20.....	2,435,532
1920-21.....	5,006,492
1921-22.....	4,988,433
1922-23.....	4,652,195
1923-24.....	5,455,020
1924-25.....	4,625,084
1925-26.....	3,328,559

Small fruits are also grown in the Maritime Provinces, quantities and values for 1925 being as follows:—

TABLE XI.—Production of Small Fruits, 1925.

—		Nova Scotia	New Brunswick	Maritime Provinces	Canada
Strawberries—					
Quantity.....	qts.	195,000	590,000	785,000	8,070,000
Value.....	\$	31,200	100,300	131,500	1,458,950
Raspberries—					
Quantity.....	qts.	30,000	17,000	47,000	1,947,000
Value.....	\$	4,800	2,890	7,690	401,690
Other berries—					
Quantity.....	qts.	100,000	20,000	120,000	2,470,000
Value.....	\$	15,000	3,200	18,200	524,700

#### E. FUR FARMING

The fur farming industry in Canada owes its establishment to experiments in the raising of foxes in captivity carried on by Prince Edward Island farmers. Since the early days of the fur trade it had been the custom in Canada for trappers to keep foxes caught in warm weather alive until the fur was prime, and this practice led to efforts being directed towards the domestication of the fox.

The first authentic record of the raising of foxes in captivity comes from Prince Edward Island where about fifty years ago a number of litters of foxes were raised on a farm near Tignish. The beauty of the fur of the silver fox and the consequent high prices realized from the sale of the pelts, caused attention to be directed chiefly to this breed, a colour phase of the common red fox, which has been established by experiments in breeding carried on by pioneer fox farmers. In 1890 began a period of rising prices for furs, and the fox farming industry grew rapidly in Prince Edward Island. Experiments were also being carried on in Nova Scotia, and by 1910 the industry had become firmly established in the Maritime Provinces. In 1913 an enumeration by the Commissioner of Agriculture of Prince Edward Island showed 277 fox farms in that province with a total of 3,130 foxes. In 1919 the Dominion Bureau of Statistics commenced the collection of annual returns of fur farms, and in 1920 the number of fox farms in the Maritime Provinces is shown to have been 418 with a total of 12,434 foxes of which 11,666 were silver foxes. The latest figures available, viz: those for the year 1924, show a total of 716 fox farms in the Maritime Provinces with a total of 20,855 foxes, 20,102 of these being silver foxes.

Although the chief branch of the fur-farming industry in Canada is fox farming, other kinds of wild fur-bearing animals are now being raised in captivity—mink, raccoon, skunk, martin, fisher, beaver and muskrat. In the Maritime Provinces in 1924 there were 5 mink farms and 1 raccoon farm, all of these being situated in Nova Scotia. There were also 4 muskrat farms, but statistics of these are omitted as the operators of such farms are in most cases unable to furnish exact particulars.

The total number of all fur bearing animals on Maritime farms at date of December 31, 1924, was 20,967 valued at \$4,438,256. The foxes on these farms numbered 20,855 valued at \$4,435,881; mink, 97, valued at \$1,775; and raccoon 15, valued at \$600. The distribution of foxes on farms, by provinces, was as follows: Prince Edward Island, 13,973 valued at \$3,148,975; Nova Scotia, 2,609, valued at \$477,085; and New Brunswick, 4,273, valued at \$809,821. Of the mink, 17 animals valued at \$425 were located on fur farms in Prince Edward Island and 80 valued at \$1,350 on fur farms in Nova Scotia. All of the raccoon were located on farms in Nova Scotia. The following table (Table XII) shows the principal statistics of fur farms for 1920, 1923 and 1924.

TABLE XII.—Statistics of Fur Farms, 1920-1924.

		Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
Number of farms.....	1920	309	55	57	421	587
	1923	448	133	89	670	1,227
	1924	458	158	106	722	1,551
Value of land and buildings.. \$	1920	640,489	67,875	101,354	809,718	1,202,591
	1923	791,636	97,713	186,580	1,075,929	2,072,226
	1924	809,593	143,065	192,542	1,145,200	2,576,923
Employees..... No.	1920	203	20	36	259	327
	1923	257	30	57	344	500
	1924	247	47	66	360	606
Salaries and wages..... \$	1920	131,650	12,728	29,145	173,523	223,519
	1923	164,051	16,783	45,645	226,479	331,923
	1924	164,074	26,650	52,115	242,839	408,643
Animals born during year... No.	1920	6,960	698	1,131	8,789	11,100
	1923	10,309	1,763	3,287	15,359	22,079
	1924	10,888	1,947	3,995	16,830	28,713
Animals died during year... No.	1920	1,061	104	78	1,243	1,818
	1923	1,684	490	354	2,528	5,257
	1924	1,472	444	510	2,426	4,768
Animals killed for pelts during year..... No.	1920	2,977	334	284	3,599	4,322
	1923	4,752	823	1,915	7,490	9,621
	1924	3,660	548	766	4,974	8,304
Animals sold during year... No.	1920	1,523	134	336	1,993	2,347
	1923	4,059	351	432	4,842	7,030
	1924	5,748	801	2,349	8,898	13,041
Value..... \$	1920	464,218	28,381	108,315	600,914	763,221
	1923	726,401	54,342	62,400	843,143	1,314,493
	1924	1,151,614	141,015	350,295	1,642,924	2,553,430
Pelts sold during year..... No.	1920	1,714	194	173	2,081	2,470
	1923	4,599	841	1,914	7,354	9,212
	1924	3,112	535	843	4,490	7,339
Value..... \$	1920	302,412	21,381	18,897	342,690	388,335
	1923	469,161	69,156	186,039	724,356	859,872
	1924	323,320	45,359	84,337	453,016	664,620
Animals on farms December 31..... No.	1920	9,759	971	1,771	12,501	16,529
	1923	13,384	2,198	3,497	19,079	29,282
	1924	13,990	2,704	4,273	20,967	37,102
Value..... \$	1920	3,089,970	209,150	532,250	3,831,370	4,722,905
	1923	2,689,372	377,973	714,985	3,782,330	6,308,232
	1924	3,149,400	479,035	809,821	4,438,256	8,389,387

*The Fur Trade.*—The value of the total raw fur production of Canada amounts to many millions of dollars annually, and only a small proportion of this is contributed by fur farms. The value of raw fur production for the season 1924-25 was \$15,441,564. This amount represents the market value of pelts of fur bearing animals taken in Canada during the season, comprising pelts of animals taken by trappers and pelts of ranch bred animals, the value of the latter constituting approximately 4 per cent of the total. In the Maritime Provinces, however, the larger proportion of pelts is supplied by the fur farms. In the season 1924-25 the value of raw fur production of the Maritime Provinces was \$844,513, over half of which was comprised in the value of pelts of ranch bred animals. The value of raw fur production in the Maritime Provinces and in the whole of Canada for the seasons 1920-21, 1923-24, and 1924-25 is given in the following table:

TABLE XIII.—Value of Raw Fur Production, 1920-25.

Season	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
	\$	\$	\$	\$	\$
1920-21.....	256,137	112,948	72,500	441,585	10,151,594
1923-24.....	471,772	266,935	248,547	987,254	15,643,817
1924-25.....	326,669	271,753	246,091	844,513	15,441,564

### Part 3. Fisheries

*Introductory.*—One of the greatest fishing areas of the world is situated off the coast of Eastern Canada. From Grand Manan to Labrador, the coast line commanding these fisheries, not including the lesser bays and indentations, measures over 5,000 miles. The Bay of Fundy is 8,000 square miles in extent, and the total fishing grounds 200,000 square miles.

Still more important than the extent of the fishing grounds of the Maritime Provinces is the quality of their product. It is an axiom among authorities that food fishes improve in proportion to the purity and coldness of the waters in which they are taken. Judged by this standard, the Canadian cod, haddock, halibut, herring, mackerel, salmon, lobster and oyster are the peer of any in the world.

The Atlantic fisheries were the first Canadian fisheries to be developed in point of time, and until 1918 they remained the most important for aggregate value of product.

The inshore or coastal fishery is carried on in small boats, usually motor driven, with crews of two or three men, and in a class of small vessels with crews of four to seven men. The means of capture employed by boat fishermen are gill nets and hooks and lines, both hand lines and trawls; whilst trap nets, haul seines and weirs are operated from the shore. Haddock as well as cod is a staple product; during the spring and summer they are split and salted, but the important season comes with the autumn, when the fish are either shipped fresh or smoked and sold as finnan haddie.

The deep-sea fisheries are worked by vessels of from 40 to 100 tons, carrying from twelve to twenty men operating with trawl lines from dories. The fleets operate on the various fishing banks, such as Grand Bank, Middle Ground and Banquereau. The vessels, built by native hands, remain at sea sometimes for months at a time. When they return, the fish, which have been split and salted on board, are taken on shore, washed and dried. The West Indies are the chief market for this product; no cod fish in the world stands the tropical climate like that cured by Nova Scotian fishermen. Steam trawling, as it is carried on in the North Sea, was introduced on the Atlantic Coast of Canada several years ago. There were ten steam trawlers operating from Nova Scotia ports in 1925. They operate practically the year round and their catches are utilized entirely for the fresh fish trade.

Lobster trapping is another distinctive industry. In 1870, there were three lobster canneries on the Atlantic coast of Canada; in 1925 the canneries numbered 478 and gave work to nearly 7,000 people; 30,000,000 lobsters is a normal catch. Oysters, once plentiful everywhere, are now found in somewhat diminished quantities. The canning of sardines, which are young herrings and not a distinct type of fish, in New Brunswick is second only to lobstering.

The fishing population of the Maritime Provinces is a specialized and stable industrial class. The coastwise fisheries are operated from April to November, or to January in sheltered districts; and though the larger vessels work all winter, several thousand men are available for a time each year for other employment. This they find about the small plots of land which most of them own or occupy, in the lumber camps of New Brunswick, or in the collieries of Nova Scotia. A few from Lunenburg and other centres engage in the West Indian Trade. Apart from restrictions of weather and close seasons, the prevailing method of paying the men on shares has a further tendency in years of low catches or prices to drive them into secondary occupations.

*Historical.*—An historical review of the total values of the fisheries of the Maritime Provinces from 1870 to 1925 is presented in Table I (production) and Table II (capital) herewith.\* Taking the three Maritime Provinces as a unit, the total value reported for 1873, the first year for which complete figures for all three provinces are available, was \$9,070,342, out of a grand total for Canada of \$10,754,997. In 1870, the total value of fisheries in Nova Scotia amounted to \$4,019,425, New Brunswick \$1,131,433, a total of \$5,150,858 for these two provinces out of a grand total for all Canada of \$6,577,391. At this time, the sea fisheries of the Maritime Provinces, the sea and inland fisheries of Quebec, and the inland fisheries of Ontario, were the only items included in making up the total of fisheries for Canada. In 1880 out of a total of \$14,499,979, the total value of fisheries in the Maritimes, while larger absolutely, amounted to a smaller proportion than in 1870, British Columbia fisheries being included in the total, and the Quebec fisheries having increased. In 1890, the total for the Maritimes amounted to \$10,376,608 out of a grand total of \$17,714,900 for all Canada, the value of British Columbia fisheries having increased by this time to \$3,481,432. In 1900, the value of the Maritime fisheries was \$12,638,087, out of a grand total for all Canada of \$21,557,639; in 1910, \$15,407,095 out of a total of \$29,965,433; in 1920, \$18,875,127 out of \$49,241,339; and in 1925, \$16,610,487 out of \$47,942,131. In the meantime the value of British Columbia fisheries had increased to \$4,878,829 in 1900; \$9,163,235 in 1910; \$22,329,161 in 1920; and \$22,414,618 in 1925.

In addition to changes in the volume of the catch a further element enters into the figures of value quoted above, namely changes in price. The index number of wholesale prices of fish computed by the Bureau as a criterion of these changes, (average prices in 1913 being used as a base or equal to 100), was in 1890, 65.4; in 1920, 173.5; and in 1925, 152.7. In Table III the gross values above referred to have been corrected on the basis of this index number, and revised valuations for the total fisheries in the Maritime Provinces and for all Canada constructed. An examination of this table shows that whereas in 1890 Maritime fisheries aggregated \$15,866,373 out of a total of \$27,087,003, in 1925 the proportion was only \$10,877,857 out of a total of \$31,396,287. After reaching \$20,800,369 in 1897, a decline set in and the figures dropped to \$17,975,996 in 1899. They remained at about this level until 1905, the revised valuation for that year being \$19,269,258, since when they have fallen off considerably. It should be added that the revised valuations for all Canada show somewhat similar tendencies, the highest total being recorded in 1905. In 1921 low points in both cases were reached, namely, \$10,115,164 in the Maritime Provinces and \$24,548,092 in all Canada.

TABLE I.—Total Value of Fish in the Maritime Provinces, with Comparative figures for all Canada, 1870-1925.

Year	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritime Provinces	Canada
1870.....	\$ Not Known	\$ 4,019,425	\$ 1,131,433	\$ 5,150,858	\$ 6,577,391
1871.....	" " "	\$ 5,101,030	\$ 1,185,033	\$ 6,286,063	\$ 7,573,199
1872.....	" " "	\$ 6,016,835	\$ 1,965,459	\$ 7,982,294	\$ 9,570,116
1873.....	\$ 207,595	\$ 6,577,085	\$ 2,285,662	\$ 9,070,342	\$ 10,754,997
1874.....	\$ 288,863	\$ 6,652,302	\$ 2,685,794	\$ 9,626,959	\$ 11,681,886
1875.....	\$ 298,927	\$ 5,573,851	\$ 2,427,654	\$ 8,300,432	\$ 10,350,335
1876.....	\$ 494,967	\$ 6,029,050	\$ 1,953,389	\$ 8,477,406	\$ 11,117,000
1877.....	\$ 763,036	\$ 5,527,858	\$ 2,133,237	\$ 8,424,131	\$ 12,005,934
1878.....	\$ 840,344	\$ 6,131,600	\$ 2,305,790	\$ 9,277,734	\$ 13,215,678
1879.....	\$ 1,402,301	\$ 5,752,937	\$ 2,554,722	\$ 9,709,960	\$ 13,529,254
1880.....	\$ 1,675,089	\$ 6,291,061	\$ 2,744,447	\$ 10,710,597	\$ 14,499,979
1881.....	\$ 1,955,290	\$ 6,214,782	\$ 2,930,904	\$ 11,100,976	\$ 15,817,162
1882.....	\$ 1,855,687	\$ 7,131,418	\$ 3,192,339	\$ 12,179,444	\$ 16,824,092
1883.....	\$ 1,272,468	\$ 7,689,374	\$ 3,185,674	\$ 12,147,516	\$ 16,958,192
1884.....	\$ 1,085,619	\$ 7,763,779	\$ 3,730,454	\$ 13,579,852	\$ 17,766,404
1885.....	\$ 1,293,430	\$ 8,283,922	\$ 4,005,431	\$ 13,582,783	\$ 17,722,973
1886.....	\$ 1,141,991	\$ 8,415,362	\$ 4,180,227	\$ 13,737,580	\$ 18,679,288
1887.....	\$ 1,037,426	\$ 8,379,782	\$ 3,559,507	\$ 12,976,715	\$ 18,386,103
1888.....	\$ 876,862	\$ 7,817,030	\$ 2,941,863	\$ 11,635,755	\$ 17,418,508
1889.....	\$ 886,430	\$ 6,346,722	\$ 3,067,039	\$ 10,300,191	\$ 17,655,254

\*From the last annual report on the Fisheries Statistics of Canada by the Dominion Bureau of Statistics.

TABLE I.—Total Value of Fish in the Maritime Provinces, with Comparative figures for all Canada, 1870-1925—concluded

Year	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritime Provinces	Canada
1890.	\$ 1,041,109	\$ 6,336,444	\$ 2,699,055	\$ 10,376,608	\$ 17,714,900
1891.	1,238,733	7,011,300	3,571,050	11,821,083	18,977,874
1892.	1,179,856	6,340,724	3,202,922	10,723,502	18,941,169
1893.	1,133,368	6,407,279	3,746,121	11,286,768	20,686,659
1894.	1,119,733	6,547,387	4,351,526	12,018,651	20,719,570
1895.	976,836	6,213,131	4,403,158	11,593,125	20,199,338
1896.	976,126	6,070,895	4,799,433	11,846,454	20,407,424
1897.	954,949	8,090,346	3,934,135	12,979,430	22,783,544
1898.	1,070,202	7,226,034	3,849,357	12,145,593	19,667,121
1899.	1,043,645	7,347,604	4,119,891	12,511,140	21,891,706
1900.	1,059,193	7,809,152	3,769,742	12,638,087	21,557,639
1901.	1,050,623	7,989,548	4,193,264	13,233,435	25,737,153
1902.	887,024	7,351,753	3,912,514	12,151,291	21,959,433
1903.	1,099,510	7,841,602	4,186,800	13,127,912	23,101,878
1904.	1,077,546	7,287,099	4,671,084	13,035,729	23,516,439
1905.	998,922	8,259,085	4,847,090	14,105,097	29,479,562
1906.	1,168,939	7,799,160	4,905,225	13,873,324	26,279,485
1907.	1,492,695	7,632,330	5,300,564	14,425,589	25,499,349
1908.	1,378,624	8,009,838	4,754,298	14,142,760	25,451,085
1909.	1,197,557	8,081,111	4,676,315	13,954,983	29,629,169
1910.	1,153,708	10,119,243	4,134,144	15,407,095	29,965,433
1911.	1,196,396	9,367,550	4,886,157	15,450,103	34,667,872
1912.	1,379,905	7,384,055	4,264,054	13,028,014	33,389,464
1913.	1,280,447	8,297,626	4,308,707	13,886,780	33,207,748
1914.	1,261,666	7,730,191	4,940,083	13,931,940	31,264,631
1915.	933,682	9,166,851	4,737,145	14,837,678	35,860,708
1916.	1,344,179	10,092,902	5,656,859	17,093,940	39,208,378
1917.	1,786,310	14,468,319	6,143,088	22,397,717	52,312,044
1918.	1,148,201	15,143,066	6,298,990	22,590,257	60,259,744
1919.	1,536,844	15,171,929	4,979,574	21,688,347	56,508,479
1920.	1,708,723	12,742,659	4,423,745	18,785,127	49,241,339
1921.	924,529	9,778,623	3,690,726	14,393,878	34,931,935
1922.	1,612,599	10,209,258	4,685,660	16,507,517	41,800,210
1923.	1,754,980	8,448,385	4,548,535	14,751,900	42,565,545
1924.	1,201,772	8,777,251	5,333,809	15,362,832	44,534,235
1925.	1,598,119	10,213,779	4,798,589	16,610,487	47,942,131

TABLE II.—Value of the Capital Investment of the Fisheries of the Maritime Provinces and of Canada, 1880-1925.

Includes value of vessels, boats, nets, traps, piers and wharves, etc., also of fish canning and curing establishments, and working capital.

Year	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritime Provinces	Total for Canada
1880.	\$ 74,305	\$ 2,895,259	\$ 552,110	\$ 3,521,674	\$ 3,936,582
1885.	493,143	3,010,000	1,075,879	4,579,022	6,697,459
1890.	348,320	3,243,310	1,184,745	4,776,375	7,372,641
1895.	479,639	3,139,968	1,710,347	5,329,954	9,253,848
1900.	442,120	3,278,623	2,361,087	6,081,830	10,990,125
1901.	425,589	3,319,334	2,233,825	5,978,718	11,491,300
1902.	395,648	3,485,489	1,943,654	5,824,791	11,305,959
1903.	464,792	3,937,428	2,005,391	6,407,611	12,241,454
1904.	444,868	4,016,661	2,113,377	6,574,906	12,356,942
1905.	417,951	4,496,897	2,182,059	7,096,907	12,880,897
1906.	460,694	4,529,301	2,171,083	7,161,078	14,555,565
1907.	488,905	4,469,041	2,332,455	7,290,401	14,826,592
1908.	547,714	5,062,148	2,365,563	7,975,425	15,508,274
1909.	568,828	5,014,909	2,346,467	7,930,204	17,357,932
1910.	601,753	5,334,083	2,576,795	8,512,631	19,019,870
1911.	641,731	5,645,276	2,894,795	9,181,802	20,932,904
1912.	851,070	6,531,590	3,508,899	10,891,559	24,388,459
1913.	948,667	7,110,210	3,600,547	11,659,424	27,464,033

TABLE II.—Value of the Capital Investment of the Fisheries of the Maritime Provinces and of Canada, 1880-1925—concluded

Year	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritime Provinces	Total for Canada
1914	\$ 1,030,464	\$ 7,568,821	\$ 3,765,020	\$ 12,364,305	\$ 24,733,162
1915	1,024,268	7,899,112	3,958,714	12,882,094	25,855,575
1916	1,178,148	8,661,643	4,487,601	14,327,392	28,728,962
1917	1,770,949	11,702,311	5,733,071	19,206,331	47,143,125
1918	1,529,184	13,084,412	6,960,327	21,573,923	60,221,863
1919	1,528,541	13,971,628	5,878,652	21,378,821	54,577,026
1920	1,309,179	13,347,270	4,931,856	19,588,305	50,405,478
1921	970,798	12,265,465	4,436,076	17,672,339	45,669,477
1922	1,161,325	12,860,960	4,614,008	18,636,293	47,764,988
1923	1,278,491	12,188,808	4,574,617	18,041,916	47,672,865
1924	1,211,858	10,990,472	5,357,891	17,560,221	43,857,350
1925	1,237,972	11,674,790	5,247,448	18,160,210	46,872,630

TABLE III.—Valuations of Fisheries in Maritime Provinces and all Canada corrected for price changes.

—	Index Number	Total Maritime Provinces	Canada
—		\$	\$
1890	65.4	15,866,373	27,087,003
1891	61.6	19,189,940	30,808,237
1892	57.3	18,714,663	33,056,141
1893	63.1	17,887,113	32,783,929
1894	61.0	19,702,707	33,966,508
1895	64.2	18,057,827	31,463,143
1896	64.9	18,253,396	31,444,413
1897	62.4	20,800,369	36,512,090
1898	63.0	19,278,719	31,217,652
1899	69.6	17,975,776	31,453,601
1900	67.3	18,778,733	32,032,153
1901	71.6	18,482,451	35,945,744
1902	69.7	17,433,703	31,505,643
1903	73.5	17,861,105	31,431,127
1904	75.6	17,243,028	31,106,401
1905	73.2	19,269,258	40,272,626
1906	76.5	18,135,064	34,352,268
1907	82.0	17,592,182	31,096,767
1908	76.3	18,535,727	33,356,599
1909	84.8	16,456,348	34,940,058
1910	89.3	17,253,186	33,555,916
1911	90.9	16,996,813	38,138,473
1912	98.5	13,226,410	33,897,933
1913	100.0	13,886,780	33,207,748
1914	98.8	14,101,154	31,644,363
1915	100.3	14,793,298	35,753,448
1916	107.1	15,960,728	36,609,130
1917	136.8	16,372,600	38,239,798
1918	172.5	13,095,801	34,933,185
1919	177.5	12,218,787	31,835,763
1920	173.5	10,879,036	28,381,175
1921	142.3	10,115,164	24,548,092
1922	142.7	11,567,987	29,292,369
1923	129.9	11,356,351	32,767,933
1924	143.7	10,690,906	30,991,117
1925	152.7	10,877,857	31,396,287

Taking the total value of all fisheries in 1890 as equal to 100, the comparative increases in the Maritime Provinces, and in all Canada since 1890 may be expressed as follows, the present importance and the relatively rapid growth of the British Columbia fisheries being reflected in the figures for Canada:—

Year	Maritime Provinces		Canada	
	At current valuations	Corrected	At current valuations	Corrected
1890.	100	100	100	100
1895.	111.72	113.81	114.02	116.16
1900.	121.79	118.36	121.69	118.26
1905.	135.93	121.45	166.41	148.68
1910.	148.48	108.74	169.15	123.88
1915.	142.99	93.24	202.43	131.99
1920.	181.90	68.57	277.97	104.78
1924.	148.05	67.38	251.39	114.41
1925.	160.07	68.56	270.01	115.91

*The Present Fishing Industry.*—A more detailed review of current conditions in the industry is as follows.\*

The total value of Canadian fisheries in 1925 was \$47,942,131. Of this amount the Maritime Provinces contributed \$16,610,487, Nova Scotia holding second place with \$10,213,779 or 21.30 p.c.; New Brunswick third place with \$4,798,589 or 10.00 p.c. and Prince Edward Island sixth place with \$1,598,119 or 3.33 p.c.

Lobster trapping was the principal branch of the industry in the Maritime Provinces as a whole with products valued at \$5,173,397 distributed by Provinces as follows:—

Prince Edward Island	.....	\$1,088,712
Nova Scotia	.....	3,014,963
New Brunswick	.....	1,069,722

Cod occupied first place in Nova Scotia with a value of \$3,760,833, with lobster second. Sardines ranked second in New Brunswick with a value of \$1,016,325, while lobsters ranked first.

The principal varieties and values of fish for the Maritime Provinces with comparative figures for all Canada for 1924 and 1925 are given in the following table:—

TABLE IV.—The fish catch, 1924 and 1925.

	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
Lobsters	1924	\$77,301	\$1,904,407	\$1,203,564	\$3,885,272
	1925	1,088,712	3,014,963	1,069,722	5,173,397
Cod	1924	81,885	3,309,209	643,321	4,034,415
	1925	150,135	3,760,833	512,013	5,443,814
Haddock	1924	554	975,660	37,039	6,232,821
	1925	1,652	1,134,327	32,546	1,013,253
Sardines	1924	—	—	1,241,508	1,241,508
	1925	—	350	1,016,325	1,016,675
Smelts	1924	133,747	131,523	844,730	1,110,000
	1925	142,496	130,182	718,149	990,827
Herring	1924	58,664	542,658	367,037	1,035,504
	1925	83,703	434,130	385,354	3,147,123
Salmon	1924	1,550	181,966	425,800	903,187
	1925	1,800	157,124	428,558	3,117,841
Mackerel	1924	37,448	688,350	49,166	13,784,920
	1925	23,246	445,185	63,968	15,760,630
Hake and cusk	1924	27,081	203,352	85,360	1,021,242
	1925	22,981	183,465	87,146	663,628
Halibut	1924	—	441,113	1,561	295,720
	1925	210	282,118	1,829	5,878,870
Oysters	1924	63,840	16,477	103,040	284,157
	1925	52,780	20,773	88,693	212,408
Pollock	1924	—	90,768	16,923	185,353
	1925	—	89,393	38,022	107,691
Clams and quahaugs	1924	4,973	11,709	137,099	127,415
	1925	9,758	13,361	88,426	320,241
Alewives	1924	600	18,958	40,499	290,063
	1925	225	39,014	65,295	60,057
Swordfish	1924	—	96,157	—	60,132
	1925	—	78,209	—	104,834
				78,209	96,157
				78,209	96,157

\*For full details of the catch and marketing of Canadian fish products by provinces and fishing districts see the annual report on Fisheries of the Dominion Bureau of Statistics, prepared in collaboration with Dominion and Provincial Fisheries Departments.

The domestic consumption of fish is relatively small in Canada, and the trade depends largely upon foreign markets. Perhaps sixty per cent of the total annual capture for all Canada is an average export, of which the United States takes approximately one-half and Great Britain one-sixth. In the fiscal year 1926, total exports amounted to \$37,487,517, of which \$14,115,596 went to the United States and \$7,264,516 to Great Britain. The most important single export was canned salmon (to Great Britain and European markets), the value of these exports in 1926 amounting to \$10,467,680. Other important items and principal countries to which exported were—cod, dry salted (to the West Indies, South America, Italy and United States), \$5,246,462; lobsters, canned (to the United Kingdom and the United States), \$4,037,259; lobsters, fresh (to the United States), \$1,255,876; herring, sea, dry-salted (to China and Japan), \$2,405,279.

The *preserving of fish* is the premier manufacturing industry in Prince Edward Island and ranks second in Nova Scotia and fifth in New Brunswick. Statistics follow (Table V):

TABLE V.—The Fish preserving Industry, 1925.

	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
Establishments.....	No. 156	249	194	599	846
Capital.....	\$ 262,680	3,794,654	1,556,624	5,613,958	21,139,985
Employees.....	No. 1,732	3,604	2,401	7,737	16,272
Salaries and wages.....	\$ 126,409	1,006,287	346,935	1,479,631	4,971,167
Cost of materials.....	\$ 737,899	4,237,119	1,535,269	6,510,287	18,680,886
Value of products.....	\$ 1,101,820	6,257,683	2,468,055	9,827,558	30,380,992

*Prices in Canada and the United States.*—In view of the discussion as to markets, the following tables of current comparative prices in Canada and the United States are appended:

AVERAGE PRICES PAID TO FISHERMEN FOR FRESH OR GREEN FISH IN THE YEAR 1925 IN NOVA SCOTIA, NEW BRUNSWICK, PRINCE EDWARD ISLAND, BOSTON, GLOUCESTER AND PORTLAND.

	COD	cts.
Boston, average.....		4.0 per lb.
Gloucester.....		2.6 "
Portland.....		3.0 "
ALL.....		3.4 "
Nova Scotia.....		2.2 "
New Brunswick.....		1.6 "
Prince Edward Island.....		1.4 "
ALL.....		2.1 "
	HADDOCK	cts.
Boston.....		3.2 "
Gloucester.....		1.5 "
Portland.....		2.8 "
ALL.....		3.0 "
Nova Scotia.....		1.9 "
New Brunswick.....		1.4 "
Prince Edward Island.....		1.2 "
ALL.....		1.9 "
	HALIBUT	cts.
Boston.....		18.9 "
Gloucester.....		10.5 "
Portland.....		17.7 "
ALL.....		18.4 "
Nova Scotia.....		10.7 "
New Brunswick.....		13.7 "
Prince Edward Island.....		12.0 "
ALL.....		10.7 "
	MACKEREL	cts.
Boston.....		4.6 "
Gloucester.....		3.3 "
Portland.....		3.4 "
ALL.....		4.3 "
Nova Scotia.....		2.5 "
New Brunswick.....		2.8 "
Prince Edward Island.....		2.6 "
ALL.....		2.5 "

## NEW YORK WHOLESALE DEALERS' PRICES FOR SALT FISH

## DRIED, COD FISH

January, 1926.....	\$11 00—12 50 cwt.
February.....	11 00—11 50 "
March.....	11 00—11 50 "
April.....	11 00—11 50 "
May.....	11 00—11 50 "
June.....	11 00—11 50 "

## MACKEREL, AMERICAN 1925 SHORE

January, 1926.....	\$22 00—24 00 cwt.
February.....	22 00—24 00 "
March.....	22 00—24 00 "
April.....	22 00—24 00 "
May.....	20 00—22 00 "
June.....	20 00—22 00 "

## MACKEREL, NOVA SCOTIAN 1925 SHORE

January, 1926.....	\$16 00—17 00 cwt.
February.....	17 00—18 00 "
March.....	17 00—18 00 "
April.....	—
May.....	—
June.....	—

## HALIFAX PRICES

## COD, DRY SALTED

January, 1926.....	\$ 9 00 per quintal
February.....	9 00 "
March.....	8 00 "
April.....	6 00 "
May.....	6 00 "
June.....	6 00 "

## SPRING MACKEREL, SALTED

January, 1926.....	\$ 9 50 per barrel
February.....	9 50 "
March.....	10 00 "
April.....	10 00 "
May.....	10 00 "
June.....	10 00 "

## FAT FALL MACKEREL, SALTED

January, 1926.....	\$15 00 per barrel
February.....	14 00 "
March.....	18 00 "
April.....	18 00 "
May.....	—
June.....	—

## Part 4. Forestry.

*Introductory.*—From the earliest times, lumbering has been the premier industry of New Brunswick, forest products holding first place in the province's exports. Although a large section of the province is admirably suited for agriculture, the settled districts are confined principally to the river valleys and the coast line, the interior forming a vast timber reserve. Of the seventeen and a half million acres in the province, about seven and a half million acres are Crown Lands and are mostly timbered. New Brunswick is everywhere drained by large rivers with numerous branches, so that logs can be driven by water from practically all points in the province to market.

In Nova Scotia fifty-four per cent of the land carried forest growth, according to a report by the Commission of Conservation in 1912. Including the brûlés and barrens, which are of potential value for forest production, more than sixty per cent of the total land area of the province can be considered as primarily forest land.

The forest resources of Nova Scotia have recently been estimated to consist of 11,010,000 M. ft. b.m. of saw material and 36,236,000 cords of pulpwood, cordwood, poles, posts and ties, making a total equivalent to 6,210,685,000 cubic feet. A similar estimate places the saw material in New Brunswick at 20,300,000 M. ft. b.m. and the pulpwood, etc., at 49,192,000 cords or a total equivalent to 9,791,173,000 cubic feet.

*Historical.*—The development of the forest industries of New Brunswick may be divided into four periods. During the first, from the landing of De Monts at St. John in 1604 to the end of the French rule in 1765, the industry was confined to the cutting of masts and spars for the French navy, the first shipment being recorded in 1700. During the colonial period, under English rule from 1763 to 1837, the industry developed more rapidly. The cutting of white pine suitable for masts and spars was first restricted and later prohibited except for naval purposes, but these restrictions were removed toward the end of the period. The first cargo of spars was shipped to England in 1780 and the export trade which began with these shipments later developed with the shipment of square timber. The first saw mill, a tidal mill, was built at St. John in 1766 and the first steam saw mill was built in the same place in 1822. The production and exportation of white pine lumber and shingles and oak staves followed, and later the trade in spruce deals developed. The arrival of the Loyalists in 1783 caused an increase in the activity of the industry. Shipbuilding and settlement increased the local demand, and the building of steam sawmills and steam ships accelerated this development by increasing the facilities for manufacturing lumber and exporting it in home built ships. The maximum of the white pine export trade was reached in 1825, but during the same year the disastrous Miramichi fire caused a serious setback to the lumbering industry. In 1833 there were 233 saw mills in operation in the colony.

In 1837 the administration of New Brunswick was taken over, and the early provincial period began. During this period, from 1837 to 1850, there was a fairly steady development of the industry with increased shipbuilding and increased exportation of spruce deals. The exportation of hemlock tanbark began at this time. During the modern period, from 1850 to the present time, the industry has had its ups and downs. Railroad construction since the fifties has opened up many new sources of timber supply. The Civil War in the United States caused a boom and a subsequent depression similar to that from which the country is now emerging. The export trade with Great Britain in spruce deals reached considerable importance when the Crimean War caused the closing of the Baltic Ports. This trade improved during the nineties and reached its maximum in 1897. During the sixties and seventies many American companies built mills on the St. John River where they sawed logs floated down the river from timber limits in the State of Maine. This lumber was admitted to the United States duty free under an agreement which was later repealed by the United States Government.

In the province of Nova Scotia, which was first settled in 1605 with the colony at Port Royal, the lumber industry developed earlier than in New Brunswick, but the different stages in its development were largely similar. In 1761 there were 31 mills operating in the province. Trade with the United States was at one time of considerable importance and the shipbuilding industry stimulated exportation to the West Indies and Great Britain.

Prince Edward Island originally possessed forests of considerable value but these were soon removed by lumbermen, shipbuilders and forest fires, and also in the process of clearing land for agriculture. As the island is so largely agricultural in nature the forest industries have, during late years, been of local importance only.

*The Lumber Industry.*—In 1871 there were 1,144 sawmills in Nova Scotia capitalized at \$955,220 employing 2,858 men with a payroll of \$330,417 and products valued at \$1,397,137. The number of mills and the value of their output in the following decades were as follows: in 1881, mills in operation, 1,190—value of products, \$3,094,137; in 1891, mills, 1,172—products, \$4,083,980; in 1901, mills, 228—products, \$2,940,107; in 1911, mills, 472—products, \$7,927,873.

In New Brunswick in 1871 there were 565 sawmills operating with a total capital of \$2,843,108 employing 7,134 men with a payroll of \$1,400,562. Their products were valued at \$6,575,759. The number of mills and the value of their products for the next four decades were as follows: in 1881, mills in operation, 478—value of products, \$6,532,826; in 1891, mills, 496—products, \$6,673,701; in 1901, mills, 236—products, \$7,041,848; in 1911, mills 334—products, \$12,199,305. The principal statistics of the industry from 1920 to 1924 inclusive, for the Maritime Provinces and for Canada as a whole, are shown in Table I.

The present tendency toward a decline in the importance of the lumber industry in the Maritime Provinces is due to a large extent to the increased cost of manufacture brought about by the longer distance logs must be transported as more accessible supplies are exhausted. This condition of affairs is general throughout eastern Canada.

The quantity and value of lumber cut in the Maritime Provinces and in Canada during 1924, classified by kinds of wood, are shown in Table II, in connection with which may be read the following statement of lath and shingles cut in the Maritime Provinces and in Canada during 1924:

LATH		M	\$
Prince Edward Island	.....	677	3,265
Nova Scotia	.....	45,799	226,914
New Brunswick	.....	391,099	2,095,886
Maritime provinces		437,575	2,325,865
Canada		1,165,819	5,975,253
SHINGLES		M	\$
Prince Edward Island	.....	4,775	13,166
Nova Scotia	.....	16,261	47,590
New Brunswick	.....	240,325	779,270
Maritime provinces		261,361	840,026
Canada		3,129,501	10,406,293

*The Pulp and Paper Industry.*—The pulp and paper industry in the Maritime Provinces is a comparatively recent development. One small mill manufacturing paper from rags was reported in Nova Scotia in the census of 1861, and two such mills in 1871, one in Nova Scotia and one in New Brunswick. The manufacture of wood pulp, which was developed during the seventies and eighties, resulted in the building of pulp mills in the Maritime Provinces, two of which were reported in Nova Scotia and one in New Brunswick in the census of 1891. These three mills were capitalised at \$298,395, employed 120 men with a payroll of \$45,270 and produced pulp and other products valued at \$108,760. During the following two decades the industry developed so that in 1901 there were four mills in each province with a total production of \$973,988, in 1911 there were six mills in each province with a production of \$311,311 for Nova Scotia and \$1,149,313 for New Brunswick. Table III shows the principal statistics of this industry in the Maritime Provinces and in Canada as a whole from 1920 to 1925. From the time of the closing down of the rag paper mills during the nineties until 1923 no paper was made in this region, but in 1923 the Bathurst Company Limited began the production of news print paper.

Dominion and provincial legislation and regulations practically prohibit the exportation of unmanufactured pulpwood cut on Crown Lands in every province in Canada but Nova Scotia. During 1924 and 1925 the exports of raw pulpwood formed 28.6 and 28 per cent respectively of the total apparent production. Since 1902 exports of raw pulpwood have gone exclusively to the United States.

*Canadian Trade in Lumber.*—Figures showing the exportation of forest products through the ports of the Maritime Provinces are available, but on account of the extensive interprovincial movement of these products, specially in the case of pulpwood, are not a Maritime index.

The total value of the exports of forest products from Canada in 1924 amounted to \$112,836,017. Sawn lumber formed 56.7 per cent of the total value or \$63,941,129, and pulpwood came second with 12 per cent or \$13,536,058. The quantity of sawn lumber exported amounted to 2,051,925 M. ft. b.m. while 1,330,250 cords of pulpwood were exported. Other principal items were:—shingles 2,645,305 M valued at \$9,441,760; lath 1,676,029 M valued at \$9,952,918; logs 343,559 M ft. b.m. valued at \$5,861,378; timber 127,773 M. ft. b.m. valued at \$3,317,225.

Exports to the United States were valued at \$91,249,482, exports to the United Kingdom at \$10,953,643 and exports to other countries at \$10,632,892. These manufactured and partly manufactured wood products formed 10.7 per cent of the total value of Canada's exports in 1924. The wood and paper group of exports which includes all commodities manufactured and unmanufactured, of forest origin, was valued at \$255,389,780 in 1924 and formed the most valuable group next to agricultural and vegetable products, making up 24.2 per cent of the total.

TABLE I.—Principal Statistics of the Lumber Industry in the Maritime Provinces and in Canada during the period, 1920 to 1924.

		Number of establishments	Capital	Employees	Salaries and wages	Cost of materials	Value of products
		No.	\$	No.	\$	\$	\$
1924	Canada	2,761	177,480,064	35,494	34,783,780	83,141,692	141,929,559
	Maritime Provinces	592	26,322,295	6,100	4,343,137	12,365,599	20,927,184
	Prince Edward Island	42	126,679	33	14,922	67,602	126,667
	Nova Scotia	348	3,557,927	1,565	815,122	2,033,036	3,705,011
	New Brunswick	202	22,637,689	4,502	3,513,093	10,264,961	17,095,506
1923	Canada	2,883	155,688,059	35,070	33,490,504	73,325,718	139,894,677
	Maritime Provinces	560	26,100,912	5,787	4,123,020	9,919,287	19,234,036
	Prince Edward Island	42	147,669	38	13,429	46,132	89,614
	Nova Scotia	331	2,666,589	1,363	661,710	1,418,598	2,755,748
	New Brunswick	187	23,286,654	4,386	3,447,881	8,454,557	16,388,674
1922	Canada	2,922	162,835,219	31,891	27,621,691	60,812,017	114,324,580
	Maritime Provinces	557	30,942,266	5,578	3,600,487	8,450,238	15,760,868
	Prince Edward Island	34	128,460	46	12,793	52,607	112,757
	Nova Scotia	320	3,457,450	1,284	696,061	1,702,428	3,446,180
	New Brunswick	203	27,356,356	4,248	2,891,633	6,695,203	12,201,931
1921	Canada	3,126	186,019,994	30,336	26,707,689	57,242,686	116,891,191
	Maritime Provinces	640	43,607,803	4,569	3,085,375	7,448,949	14,778,881
	Prince Edward Island	50	153,308	68	32,652	92,892	187,965
	Nova Scotia	390	4,574,512	1,520	716,260	2,289,932	4,339,961
	New Brunswick	200	38,879,983	2,981	2,336,463	5,086,125	10,250,955
1920	Canada	3,481	199,651,576	41,158	44,728,675	103,077,980	168,171,987
	Maritime Provinces	753	41,828,121	8,007	6,545,939	17,722,550	27,893,943
	Prince Edward Island	53	187,327	70	40,718	135,540	243,883
	Nova Scotia	476	8,203,251	2,577	1,656,128	5,136,083	9,275,934
	New Brunswick	224	33,437,543	5,360	4,849,093	12,451,227	18,374,126

TABLE II.—Production of Lumber in the Maritime Provinces and in Canada, 1924.

Kinds of Wood	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
Quantities	M ft. b.m.	M ft. b.m.	M ft. b.m.	M ft. b.m.	M ft. b.m.
Total quantity (c).....	4,138	120,760	466,929	591,827	3,878,942
Spruce.....	2,710	81,842	396,289	480,841	1,260,673
Balsam fir.....	823	2,269	23,400	26,492	70,466
White pine.....	228	12,103	26,203	38,534	614,532
Hemlock.....	91	15,934	10,436	26,461	291,665
Cedar.....	—	—	555	555	115,185
Yellow birch.....	154	3,861	3,805	7,820	64,313
White birch.....	19	568	1,557	2,144	12,096
Jack pine (a).....	10	305	905	1,220	101,077
Tamarack.....	—	—	10	10	52,068
Maple.....	43	2,277	522	2,842	52,017
Poplar (b).....	3	115	275	393	10,473
Red pine.....	30	107	1,432	1,569	124,289
Basswood.....	—	—	65	65	24,080
Beech.....	27	1,249	124	1,400	7,063
Elm.....	—	—	5	5	17,814
Ash.....	—	17	12	29	5,752
Oak.....	—	113	—	113	2,783
Butternut.....	—	—	10	10	212
Unspecified.....	—	—	1,324	1,324	2,609

(a) Total for Canada includes lodge pole pine.

(b) Total for Canada includes cottonwood.

(c) Includes some kinds of wood not enumerated.

TABLE II.—Production of Lumber in the Maritime Provinces and in Canada, 1924—concluded

Kinds of Wood	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
Values	\$	\$	\$	\$	\$
Total value (c).....	101,286	2,621,105	12,407,262	15,129,653	104,444,622
Spruce.....	62,846	1,764,509	10,459,542	12,286,897	32,451,904
Balsam.....	19,392	46,595	555,503	621,490	1,591,866
White pine.....	8,260	295,401	845,762	1,149,423	21,307,256
Hemlock.....	2,235	333,340	242,159	577,734	6,255,404
Cedar.....	—	—	14,571	14,571	4,673,247
Yellow birch.....	5,012	84,329	140,997	230,338	2,365,886
White birch.....	575	12,662	51,276	64,513	449,457
Jack pine (a).....	400	7,625	16,747	24,772	2,330,673
Tamarack.....	—	—	250	250	1,141,415
Maple.....	1,311	44,661	12,835	58,807	2,016,089
Poplar (b).....	70	2,230	5,615	7,915	224,278
Red pine.....	750	2,316	33,722	36,788	3,974,009
Basswood.....	—	—	1,699	1,699	828,088
Beech.....	435	23,012	2,770	26,217	199,455
Elm.....	—	—	125	125	667,579
Ash.....	—	425	300	725	200,356
Oak.....	—	4,000	—	4,000	132,347
Butternut.....	—	—	250	250	7,848
Unspecified.....	—	—	23,139	23,139	48,610

(a) Total for Canada includes lodge pole pine.

(b) Total for Canada includes cottonwood.

(c) Includes some kinds of wood not enumerated.

TABLE III.—Principal Statistics of the Pulp and Paper Industry in the Maritime Provinces and in Canada during the period, 1920 to 1925.

—	—	Number of establish- ments	Capital	Em- ployees	Salaries and wages	Cost of materials	Value of products
1925	Canada.....	114	460,397,772	28,031	38,560,905	76,514,990	193,092,937
	Maritime Provinces.....	13	23,235,916	1,818	1,935,218	4,396,214	8,639,483
	Nova Scotia.....	8	5,799,099	457	331,526	478,913	1,140,023
	New Brunswick.....	5	17,436,817	1,361	1,603,692	3,917,301	7,499,460
1924	Canada.....	115	459,457,696	27,627	37,649,528	66,965,855	179,259,504
	Maritime Provinces.....	14	30,567,950	1,667	1,695,177	3,806,369	7,698,252
	Nova Scotia.....	9	9,440,339	426	216,025	322,747	830,633
	New Brunswick.....	5	21,127,611	1,241	1,479,152	3,483,622	6,867,619
1923	Canada.....	110	417,611,678	29,234	38,382,845	66,330,043	184,414,675
	Maritime Provinces.....	12	23,831,908	1,756	1,717,052	3,674,751	7,638,592
	Nova Scotia.....	7	6,611,071	479	235,734	301,013	838,358
	New Brunswick.....	5	17,220,837	1,277	1,481,318	3,373,738	6,800,234
1922	Canada.....	104	381,006,324	25,830	32,918,955	60,238,665	155,785,391
	Maritime Provinces.....	13	22,978,186	1,739	1,555,850	3,594,852	7,372,061
	Nova Scotia.....	8	6,667,234	509	256,798	429,517	1,166,749
	New Brunswick.....	5	16,310,952	1,230	1,299,052	3,165,235	6,205,312
1921	Canada.....	100	379,812,751	24,619	34,199,090	58,327,632	149,215,005
	Maritime Provinces.....	11	29,515,901	1,305	1,314,056	2,593,765	5,919,751
	Nova Scotia.....	6	6,121,130	254	162,827	253,040	676,449
	New Brunswick.....	5	23,394,271	1,051	1,151,229	2,340,725	5,243,302
1920	Canada.....	100	347,553,333	31,298	45,253,893	84,208,788	232,032,227
	Maritime Provinces.....	11	25,254,363	1,989	2,179,570	4,218,683	12,732,441
	Nova Scotia.....	6	5,948,012	531	332,795	335,033	1,067,445
	New Brunswick.....	5	19,306,351	1,458	1,846,775	3,883,650	11,664,996

## Part 5. Mining

*General.*—The total value of mineral production in Canada was in 1923, \$214,079,331; in 1924, \$209,583,406, and in 1925, \$226,583,333. To these totals the Maritime Provinces contributed in 1923, \$32,111,350, or 14.9 per cent; in 1924, \$25,789,612, or 12.3 per cent; and in 1925, \$19,369,470, or 8.5 per cent. Of the 1925 production of Canada, Nova Scotia accounted for \$17,625,612, or 7.8 per cent; and New Brunswick for \$1,743,858, or 0.7 per cent. There are no mines in Prince Edward Island, but there is a small annual production of sand and gravel for railway ballast, and also a small output of clay products. A summary of the principal statistics relative to the mining, metallurgical, structural materials and clay products industries in the Maritime Provinces in 1923 and 1924 is given in Table I.

TABLE I.—Principal Statistics relating to the Mining, Metallurgical, Structural Materials and Clay Products Industries, 1923 and 1924.

		Nova Scotia (a)	New Brunswick	Maritime Provinces (a)	Canada
Number of active operators.....	1923	80	44	124	2,295
	1924	72	39	111	2,214
Number of operating plants or mines.....	1923	113	79	192	8,150
	1924	103	85	188	7,840
Capital employed.....	1923	\$63,544,560	\$ 3,300,139	\$66,844,699	\$578,837,012
	1924	59,608,296	3,362,851	62,971,147	632,443,946
Salaries and wages paid.....	1923	17,613,514	1,339,229	18,952,743	91,334,877
	1924	14,247,382	1,104,918	15,352,300	82,787,421
Number of employees.....	1923	15,280	1,334	16,614	66,952
	1924	14,172	1,190	15,362	64,328
Miscellaneous expenses(b).....	1923	9,994,001	484,363	10,478,364	50,400,287
	1924	203,533	152,536	356,069	28,493,006
Cost of fuel and electricity.....	1923	2,927,317	154,823	3,082,140	21,257,336
	1924	2,772,595	120,950	2,893,545	19,587,452
Total expenditures.....	1923	30,534,832	1,978,415	32,513,247	162,992,500
	1924	17,223,510	1,378,404	18,601,914	130,867,879
Value of production.....	1923	29,648,893	2,462,457	32,111,350	214,079,331
	1924	23,820,352	1,969,260	25,789,612	209,583,406

(a) Includes a small production of railway ballast and clay-products from Prince Edward Island.

(b) No miscellaneous expenses item collected for coal in 1924.

For a general view of the trend of mineral production in the Maritimes back to Confederation (the survey for certain products going back prior to Confederation), the reader is referred to the historical tables at the close of the present section (Table VIII and Table IX). A brief reference to present and past conditions by provinces and principal mineral products is as follows:

*Nova Scotia.*—Because of the geographical position of Nova Scotia on the Atlantic seaboard, this province was among the first in Canada to have its mineral resources explored. In mining, and especially in the production of bituminous coal, Nova Scotia has had a widespread reputation for over 200 years, while its gypsum deposits, which are among the most extensive in Canada, are only in the primary stage of development. In addition to these resources, there are deposits of iron, gold and antimony that have added much to the mineral wealth of the province. Non-metallics, such as dolomite, limestone, salt, and building stone, also have their place.

A protective tariff designed to promote the coal-mining industry in Nova Scotia was adopted in 1877, when a duty was placed on American soft coal entering Canada; this made it profitable for the Nova Scotia mine operators to compete with United States producers in the markets along the St. Lawrence river. With the advent of the steel industry, using the iron ore from the neighbouring country of Newfoundland, the consumption of coal was further increased.

Gold was discovered in Nova Scotia about the year 1860, and the auriferous area has been variously estimated to represent from 3,000 to 5,000 square miles. Considerable work has been done on these gold ores, many of which contain arsenic, but of late there has been little activity of production except in the year 1923 when the price of arsenic was high.

A purview of the mineral production of Nova Scotia for 1923, 1924 and 1925 is afforded by Table II.

TABLE II.—Mineral Production of Nova Scotia, 1923, 1924 and 1925.

Product	Unit of Measure	1923		1924		1925	
		Quantity	Value	Quantity	Value	Quantity	Value
<i>Metallic—</i>							
Arsenic.....	lb.	45,000	\$ 2,250	381,092	\$ 15,244	—	—
Gold.....	fine oz.*	680	13,556	1,091	21,672	1,626	33,612
Manganese ore.....	tons	200	1,400	—	—	—	—
Silver.....	fine oz.	—	—	—	—	86	59
<i>Non-Metallic—</i>							
Barytes.....	tons	209	4,368	151	3,308	95	2,259
Coal.....	tons	6,597,838	28,170,458	5,557,441	22,280,554	3,842,978	15,826,680
Grindstones.....	tons	256	7,906	338	12,525	439	16,723
Gypsum.....	tons	341,705	747,934	441,752	915,845	551,230	1,070,408
Quartz.....	tons	—	—	—	—	1,352	6,760
Salt.....	tons	4,480	39,151	4,551	37,469	6,598	49,889
Tripolite.....	tons	130	3,250	33	838	—	—
<i>Structural Materials and Clay Products—</i>							
Clay products.....	—	—	413,974	—	\$ 359,288	—	\$ 425,710
Lime.....	bush.	42,370	7,199	2,229	936	8,243	3,464
Stone.....	tons	138,682	177,090	67,535	111,824	102,125	134,686
Sand and gravel†.....	tons	224,016	60,357	306,873	60,849	—	55,362
Total.....	—	—	29,648,893	—	23,820,352	—	17,625,612

\*Includes a small amount of silver in 1923 and 1924.

†Includes railway ballast for P.E.I.

‡Includes small production from P.E.I.

*Coal.*—Coal is the principal mineral product of the Maritime Provinces. The coal fields, though not so extensive as those of some of the western provinces, are more highly developed. The estimated coal resources of Nova Scotia are shown in Table III:

TABLE III.—Estimated Coal Resources of Nova Scotia—From Report of Mr. D. B. Dowling (Memoir 59, Geological Survey Publication, 1915).

County	Actual Reserve Tons	Probable Additional Reserve Tons
Cumberland.....	682,000,000	250,000,000
Colchester.....	—	1,000,000
Pictou.....	390,440,000	450,000,000
Antigonish.....	—	20,000,000
Richmond.....	—	12,360,000
Inverness—Land.	61,800,000	22,000,000
Marine.....	86,000,000	73,000,000
Cape Breton—Land.....	1,027,911,000	—
Marine (3 miles).....	—	4,063,457,000
Marine (3 to 5 miles).....	—	2,639,000,000
Less quantity mined.....	60,000,000	—
Total.....	2,188,151,000	7,530,817,000
Grand total.....	—	9,718,968,000

Production of coal during 1923 was valued at \$28,170,458, or 95.0 per cent of the total mineral production of Nova Scotia; during 1924 it amounted to \$22,280,554, or 93.5 per cent; and in 1925 this figure stood at \$15,826,680, or 89.7 per cent. The output of the Nova Scotia mines was distributed by districts as below. These figures are supplemented by Table IV.

—	1923	1924	1925
Cape Breton.....tons	4,661,373	4,135,693	2,568,071
Cumberland.....“	862,087	674,806	518,733
Inverness.....“	164,681	88,474	149,668
Pictou.....“	909,697	658,468	606,506
Total.....tons	6,597,838	5,557,441	3,842,978

TABLE IV.—Principal Statistics of the Coal Mining Industry in Nova Scotia and New Brunswick, 1923-1924-1925.

—	Nova Scotia	New Brunswick
Number of firms.....1923	21	9
	1924	20
	1925	19
Number of operating mines.....1923	56	17
	1924	50
	1925	47
Capital employed.....1923	\$ 58,099,321	\$ 1,694,138
	1924	54,708,244
	1925	54,149,478
Number of employees.....1923	14,119	643
	1924	12,994
	1925	8,853
Salaries and wages.....1923	\$ 16,744,365	\$ 816,163
	1924	13,354,904
	1925	11,673,653
Value of products..... <sup>a</sup>	\$ 28,170,458	\$ 1,196,772
	1924	22,280,554
	1925	15,826,680

*Iron and Steel.*—A great industrial development has taken place in the iron and steel industry at Sydney and New Glasgow, based on the local available fuels and fluxes and the iron ores of Newfoundland. Iron ore occurs in the province of Nova Scotia in small beds and pockets, but it cannot compete with the hematite ore from the neighbouring colony. The Londonderry mines which were opened in 1849 have been idle since 1908, and those of the Nictaux-Torbrook district in Annapolis county although yielding 350,000 tons between 1891 and 1913 are no longer worked. Another deposit is in the Pictou iron ranges. No iron ore is reported as having been mined in Nova Scotia since 1918.

TABLE V.—Principal Statistics of the Iron, Steel and Ferro-Alloy Industry of Nova Scotia and Canada, 1923, 1924 and 1925.

—	Nova Scotia	Canada
Number of establishments.....	1923	3
	1924	4
	1925	4
Capital employed.....	1923	\$13,415,921
	1924	16,577,765
	1925	17,184,711
Number of employees.....	1923	973
	1924	1,303
	1925	1,190
Salaries and wages.....	1923	\$1,407,643
	1924	937,383
	1925	1,136,133
Value of products (*).....	1923	\$13,287,678
	1924	6,949,982
	1925	6,967,662

(\*) In 1923 the figures include the value of products for sale and inter-plant transfers; in 1924 and 1925 products for sale are shown.

*Gypsum.*—Gypsum is also an important mineral product of the province. Prior to 1833, activities in the gypsum industry in Nova Scotia consisted principally of the mine operations carried on by individual producers. The crude material was shipped to mills located in the United States. At the present time there are 9 companies operating gypsum properties. One firm ships crushed gypsum to Montreal; 3 firms ship calcined gypsum; and 5 ship crude gypsum to the United States. No calcined gypsum is exported except a small amount to Newfoundland.

TABLE VI.—Principal Statistics of the Gypsum Industry, in Nova Scotia, 1923-1924-1925.

—	1923	1924	1925
Number of establishments.....	9	9	9
Capital employed.....	\$1,961,223	\$2,219,940	\$2,329,389
Number of employees.....	651	785	629
Salaries and wages.....	\$ 487,192	\$ 616,658	\$ 542,676
Cost of fuel and electricity.....	\$ 60,699	\$ 69,176	\$ 70,683
Miscellaneous expenses.....	\$ 184,291	\$ 147,106	\$ 331,434
Value of products.....	\$ 747,934	\$ 915,845	\$ 1,070,408

*Other Mine Products.*—Gold is also found in this province; during the years 1862-1925 there have been 914,130 fine ounces recovered valued at \$18,896,826. The metal has been derived almost entirely from quartz ores, but it also occurs in deposits of arsenical pyrites which when the price warrants, is mined for the recovery of arsenic as well.

Mining of gold reached its peak in 1902 when the output amounted to 30,348 fine ounces. There has been little activity of late years, but it has been stated by mining authorities that with the later knowledge of the metallurgy of gold, with the newer mining methods at present prevailing in up-to-date mining camps, and with the application of hydro-electric power there is a possibility that Nova Scotia may again become one of the gold-producing provinces of the Dominion.

Manganese ores and barytes are being mined, and there have been important recent developments in the discovery and exploitation of valuable beds of rock salt, while there is also a fairly steady production of grindstones, pulpstones and scythestones. Tripolite deposits have been worked from time to time. From the widely-distributed clays of the province there is an

annual production of brick, tile and semi-refractory clay products. Marbles, granites and sandstones of excellent quality for building and ornamental purposes are to be found, as well as limestone for building, fluxing ore and lime-making.

*New Brunswick.*—Although there are many important economic minerals in the province of New Brunswick, development of these resources has not been as rapid here as in other provinces of the Dominion, probably because of the general concealment of the rocks by forests, which adds to the difficulty of locating mineralized areas suitable for commercial development. Actual mining has not progressed therefore to the extent that geological indications would warrant, and very little of the province has been prospected.

At present, activities are restricted mainly to the mining of bituminous coal, the quarrying of gypsum and stone, and the production of petroleum, natural gas and lime.

Coal is found at several places in the broad carboniferous belt, extending westward from the coast in Albert and Kent counties through Kings, Queens, Sunbury and York. There is a well-known deposit near Minto, Grand Lake district, at Beersville, on the coal branch of the Richibucto river, and at Dunsinane, thirty miles southwest of Moncton, but it has been worked economically only in the vicinity of Minto. Here, the seam runs from sixteen to thirty inches in thickness and is found at various depths down to 120 feet. The production of coal in 1924 amounted to 217,121 tons which was valued at \$932,185, and in 1925 to 208,012 tons worth \$815,367.

Gypsum ranks next to coal and is found in localized deposits. It is quarried at Hillsborough and part of the production is there made into plaster by the Albert Manufacturing Company, who have a large and well-equipped plant. Owing to the excellent water transportation facilities, considerable quantities of crude gypsum are exported to mills in the United States.

Natural gas and petroleum produced in New Brunswick come from the Stoney Creek district south of Moncton. Extensive deposits of bituminous or oil shales occur in Albert and Westmoreland counties near Moncton, but as yet these have not been worked commercially.

Other materials such as wolframite (the ore of tungsten), copper in the form of chalcopyrite, iron ore in the form of silicious magnetite, antimony, manganese and tripolite have also been located.

The total mineral production of New Brunswick during 1925 was valued at \$1,743,858, of which coal amounted to \$815,367 or 46.7 per cent, and gypsum to \$408,917 or 23.4 per cent. Other mineral products obtained in the province, were, natural gas, petroleum, grindstones, clay products, stone, sand and gravel. Details of the mineral production in New Brunswick during 1923, 1924 and 1925 are given in the accompanying table.

TABLE VII.—Mineral Production of New Brunswick, 1923, 1924 and 1925.

Mineral	Unit of Measure	1923		1924		1925	
		Quantity	Value	Quantity	Value	Quantity	Value
<i>Metallic</i> —							
Manganese ore.....	tons	—	\$—	584	\$4,088	—	\$—
<i>Non-Metallic</i> —							
Coal.....	tons	276,617	1,196,772	217,121	932,185	208,012	815,367
Grindstones.....	tons	1,758	72,177	2,113	99,299	1,642	79,661
Gypsum.....	tons	104,740	564,680	86,738	476,804	71,745	408,917
Natural gas.....	M. cu. ft.	640,300	126,068	599,972	113,577	639,235	122,394
Petroleum.....	bbl.	8,826	35,642	5,561	21,313	5,376	18,756
<i>Structural Materials and Clay Products</i> —							
Clay products.....	.....	—	62,587	—	74,994	—	69,473
Lime.....	bush.	329,548	143,814	208,180	108,890	202,106	92,216
Stone.....	tons	22,448	166,083	19,229	114,111	25,391	124,743
Sand and gravel.....	tons	608,528	94,634	141,897	23,999	70,156	12,331
Total.....	.....	—	2,462,457	—	1,969,260	—	1,743,858

TABLE VIII.—Historical—Principal Mineral Products of the Maritime Provinces.

(Representative figures illustrating the trend of production of the more important minerals of the Maritime Provinces)

	Nova Scotia		New Brunswick	
	Quantity	Value	Quantity	Value
COAL (a)	tons	\$	tons	\$
1785-1873.....	8,053,670	12,583,860	—	—
1880.....	1,177,669	1,840,108	—	—
1885.....	1,547,990	2,418,735	—	—
1890.....	2,181,033	3,407,864	7,110	13,850
1895.....	2,225,145	3,476,790	9,500	14,250
1900.....	3,623,536	8,088,250	10,000	15,000
1905.....	5,646,583	10,083,184	29,400	58,800
1910.....	6,431,142	12,919,705	55,455	110,910
1915.....	7,463,370	16,659,308	127,391	309,612
1916.....	6,912,140	18,514,662	143,540	386,016
1917.....	6,327,091	19,410,737	189,095	708,010
1918.....	5,818,562	21,095,470	268,212	1,331,710
1919.....	5,790,196	22,350,157	166,377	735,386
1920.....	6,437,156	32,314,523	171,610	1,091,440
1921.....	5,734,928	27,782,050	187,192	920,666
1922.....	5,569,072	24,629,921	287,513	1,107,643
1923.....	6,597,838	28,170,458	276,617	1,196,772
1924.....	5,557,441	22,280,554	217,121	932,185
1925.....	3,842,978	15,826,680	208,012	815,367

(a) For the years 1919 and 1923 the tonnage shown is the total output from all mines; for previous years the figures include only sales, colliery consumption and coal used by operators.

GYPSUM	(b)	(b)	(b)	(b)
1874.....	67,830	68,164	—	—
1880.....	125,685	111,833	10,375	10,987
1885.....	81,887	77,898	15,140	27,730
1890.....	181,285	154,972	39,024	30,986
1895.....	156,809	133,929	66,949	63,839
1900.....	138,712	108,828	112,294	145,850
1905.....	272,252	298,248	163,563	232,586
1910.....	400,455	458,638	90,236	213,579
1915.....	298,864	339,857	74,501	184,929
1916.....	238,212	278,160	39,546	153,064
1917.....	215,472	301,261	38,556	191,631
1918.....	49,365	115,976	27,225	214,114
1919.....	163,852	250,174	42,409	315,656
1920.....	260,661	573,752	49,405	428,183
1921.....	206,831	511,883	54,030	360,220
1922.....	332,404	580,148	82,462	517,668
1923.....	341,705	747,934	104,740	564,680
1924.....	441,752	915,845	86,738	476,804
1925.....	551,230	1,070,408	71,745	408,917

(b) Export figures, production figures not being available.

IRON ORE				
1876.....	15,274	—	—	—
1880.....	51,193	—	—	—
1885.....	48,129	—	—	—
1890.....	49,206	—	—	—
1895.....	83,792	—	—	—
1900.....	18,940	—	—	—
1905.....	84,952	—	—	—
1910.....	18,134	—	5,336	—
1913.....	20,436	—	86,416	—
1915.....	—	—	3,683	—
1916.....	—	—	—	—
1917.....	—	—	—	—
1918.....	130	—	—	—
1919.....	—	—	—	—
1920-1925.....	no production	—	no production	—

TABLE VIII.—Historical—Principal Mineral Products of the Maritime Provinces—*continued*

Years	Nova Scotia		New Brunswick	
	Quantity	Value	Quantity	Value
CLAY PRODUCTS	tons	\$	tons	\$
1910.	—	204,782	—	56,475
1915.	—	221,881	—	35,780
1916.	—	238,470	—	42,881
1917.	—	331,542	—	51,304
1918.	—	303,515	—	39,055
1919.	—	432,900	—	52,941
1920.	—	541,114	—	73,484
1921.	—	361,761	—	66,600
1922.	—	(a) 431,618	—	75,425
1923.	—	413,974	—	62,587
1924.	—	(a) 359,288	—	74,994
1925.	—	(a) 425,710	—	69,473

(a) Includes a small production of clay products from P.E.I.

LIME	Bushels	Bushels	Bushels	Bushels
1906.	50,000	13,600	405,450	94,290
1910.	(b) 55,750	13,490	470,050	105,593
1915.	915,086	183,017	369,117	93,797
1916.	(b) 911,534	182,506	424,113	104,635
1917.	(b) 986,106	197,344	532,251	171,248
1918.	748,314	149,663	482,548	221,935
1919.	366,543	73,309	468,533	223,193
1920.	201,500	40,300	701,859	365,030
1921.	25,914	6,085	562,447	203,084
1922.	—	—	560,834	187,895
1923.	42,370	7,199	329,548	143,814
1924.	2,229	936	208,180	108,890
1925.	8,243	3,464	202,106	92,216

(b) Includes a small production from P.E.I.

STONE	Tons	Tons	Tons	Tons
1910.	—	227,635	—	58,988
1915.	—	367,924	—	153,512
1916.	—	459,298	—	112,257
1917.	—	569,521	—	111,150
1918.	—	478,721	—	99,044
1919.	—	413,194	—	125,294
1920.	—	420,175	—	280,167
1921.	58,923	116,602	15,125	97,290
1922.	87,955	119,492	12,027	104,730
1923.	138,682	177,090	22,448	166,083
1924.	67,535	111,824	19,229	114,111
1925.	102,125	134,686	25,391	124,743

TABLE VIII.—Historical—Principal Mineral Products of the Maritime Provinces—*concluded*

Years	Nova Scotia		New Brunswick	
	Quantity	Value	Quantity	Value
<b>GOLD</b>				
1862.	6,863	141,871	—	—
1870.	18,740	387,392	—	—
1875.	10,576	218,629	—	—
1880.	12,472	257,823	—	—
1885.	20,945	432,971	—	—
1890.	22,978	474,990	—	—
1895.	21,919	453,119	—	—
1900.	28,955	598,553	—	—
1905.	13,707	283,353	—	—
1910.	7,928	163,891	—	—
1915.	6,636	137,180	—	—
1916.	4,562	94,305	—	—
1917.	2,210	45,685	—	—
1918.	1,176	24,310	—	—
1919.	850	17,571	—	—
1920.	690	14,263	—	—
1921.	439	9,075	—	—
1922.	1,042	21,540	—	—
1923.	655	13,540	—	—
1924.	1,047	21,643	—	—
1925.	1,626	33,612	—	—
<b>PETROLEUM</b>			<b>Barrels</b>	
1910.	—	—	1,485	1,826
1915.	—	—	1,020	1,423
1916.	—	—	1,345	2,663
1917.	—	—	2,341	5,460
1918.	—	—	3,009	7,402
1919.	—	—	4,225	13,141
1920.	—	—	5,148	19,963
1921.	—	—	7,479	33,022
1922.	—	—	7,778	32,732
1923.	—	—	8,826	35,642
1924.	—	—	5,561	21,313
1925.	—	—	5,376	18,756
<b>NATURAL GAS</b>			<b>M. Cu. Ft.</b>	
1912.	—	—	173,903	36,549
1915.	—	—	430,692	60,383
1916.	—	—	610,118	79,628
1917.	—	—	796,775	103,735
1918.	—	—	792,396	107,842
1919.	—	—	682,890	120,510
1920.	—	—	682,502	130,506
1921.	—	—	708,743	139,375
1922.	—	—	753,898	148,040
1923.	—	—	640,300	126,068
1924.	—	—	599,972	113,577
1925.	—	—	639,235	122,394

TABLE IX.—Values of Mineral Production of Maritime Provinces with totals for all of Canada, 1900, 1905, 1910, 1915, 1920-25.

Years	Nova Scotia	New Brunswick	Total Maritime Provinces	CANADA
	\$	\$	\$	\$
	(a)			
1900.....	9,298,479	439,060	9,737,539	64,420,877
1905.....	11,507,047	559,035	12,066,082	69,078,999
1910.....	14,195,730	581,942	14,777,672	106,823,623
1915.....	18,088,342	903,467	18,991,809	137,109,171
1920.....	34,130,017	2,491,787	36,621,804	227,859,665
1921.....	28,912,111	1,901,505	30,813,616	171,923,342
1922.....	25,923,499	2,263,692	28,187,191	184,297,242
1923.....	29,648,893	2,462,457	32,111,350	214,079,331
1924.....	23,820,352	1,969,260	25,789,612	209,583,406
1925.....	17,625,612	1,743,858	19,369,470	226,583,333

(a) Includes a small production from Prince Edward Island.

#### Part 6. Water Powers—Central Power Stations

The water powers of the Maritime Provinces are capable of developing a minimum of 74,000 horse power, and by the creation of storage basins can develop six or seven times that amount. In Nova Scotia for example, where the minimum continuous water power is estimated at 20,750 h.p., there are already installed, through the establishment of storage basins, water wheels and turbines with a total capacity of 65,327 h.p.

In Prince Edward Island the individual falls are of small capacity, and many were developed before the days of electricity, to drive saw mills, grist mills, etc.; of a total of 2,274 horse power developed in all industries, only 236 horse power is developed in central electric stations. In Nova Scotia 28,765 horse power, or 44 per cent, is developed in central electric stations out of a total of 65,327 h.p., and in New Brunswick central electric station development is 21,085 horse power, or 47 per cent of the total of 44,631 h.p.

The total installation of water wheels in central electric stations in the three Maritime Provinces is 50,086 horse power; the next largest installation is in pulp and paper mills where 29,639 horse power is developed; the remaining 27,522 horse power is developed in various other industries.

Water power has not been developed in the Maritimes since 1890 as rapidly as in the rest of Canada, where improvements in long distance transmission gave a great impetus to development. In Prince Edward Island many small falls were already being used for local industries; in Nova Scotia and New Brunswick cheap domestic coal for use in both central electric stations and in the power houses of other industries had a deterring effect on the investment of capital in hydro electric plants; whereas in Quebec and Ontario the coal supply was distant, and abundant waterpower awaited only the means of transmission. Conditions somewhat similar to those of Ontario and Quebec existed also in Manitoba and British Columbia, and to a less extent in Alberta. The rate of development of water power is therefore not as significant in the Maritimes as in the other provinces.

For the same reasons the growth of central electric stations in the Maritimes is not as good a barometer of business development as in Quebec and Ontario. There were no electric light and power stations recorded in the Census of 1881. The Censuses of 1891, 1901 and 1911 recorded capital invested but not the production in k.w. hrs. It is only therefore with the institution of the Industrial Census in 1917 that complete records become available. The figures of total hydraulic installations and of capital investment in central electric stations are brought together in the accompanying tables (Table I and Table II). Much of the increase shown in late years was due to the activities of the provincial power commissions of Nova Scotia and New Brunswick. The general status of the central electric station industry is outlined in Table III.

TABLE I.—Hydraulic Installation of Maritime Provinces (horse power).

Year	New Brunswick	Prince Edward Island	Nova Scotia	Maritime Provinces	Canada
1890.....	2,405	1,283	12,308	15,996	70,796
1891.....	2,475	1,283	12,383	16,151	71,219
1892.....	2,500	1,312	12,383	16,195	72,353
1893.....	2,540	1,312	12,503	16,355	78,268
1894.....	2,540	1,312	13,849	17,701	84,623
1895.....	2,550	1,312	13,964	17,826	86,754
1896.....	2,550	1,325	13,999	17,874	93,837
1897.....	2,576	1,325	14,087	17,988	98,912
1898.....	2,596	1,361	14,093	18,050	127,511
1899.....	2,671	1,441	17,166	21,278	141,192
1900.....	4,601	1,521	19,810	25,932	170,359
1901.....	4,601	1,581	20,132	26,314	235,946
1902.....	4,636	1,641	21,944	28,221	269,621
1903.....	7,427	1,641	23,518	32,586	295,503
1904.....	8,459	1,641	26,228	36,328	352,493
1905.....	8,594	1,663	26,563	36,820	451,553
1906.....	10,134	1,701	26,952	38,787	606,316
1907.....	10,172	1,701	27,977	39,850	725,960
1908.....	10,407	1,701	28,419	40,527	818,559
1909.....	10,507	1,734	29,381	41,622	888,468
1910.....	11,197	1,760	31,476	44,433	975,150
1911.....	13,635	1,760	32,226	47,621	1,358,333
1912.....	15,185	1,785	32,773	49,743	1,476,715
1913.....	15,185	1,825	32,964	49,974	1,683,984
1914.....	15,380	1,843	33,469	50,692	1,946,429
1915.....	15,405	1,942	33,596	50,943	2,100,677
1916.....	15,480	1,962	33,656	51,098	2,217,354
1917.....	16,251	1,989	34,051	52,291	2,282,570
1918.....	18,371	2,198	34,318	54,887	2,375,412
1919.....	19,126	2,233	35,193	56,552	2,463,035
1920.....	21,976	2,233	37,623	61,832	2,508,454
1921.....	30,976	2,252	48,783	82,011	2,706,738
1922.....	42,051	2,274	48,951	93,276	2,999,030
1923.....	42,551	2,274	50,056	94,881	3,186,624
1924.....	44,631	2,274	65,327	112,232	3,571,444
1925.....	41,546	2,274	65,717	109,537	4,290,428

TABLE II.—Total Capital invested in Central Electric Stations.

Year	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritimes	Total Canada
	\$	\$	\$	\$	\$
1891.....	31,200	503,110	346,005	880,315	4,113,771
1901.....	—	175,400	615,455	790,855	11,891,025
1911.....	114,000	3,846,457	2,561,084	6,521,541	110,838,746
1917.....	211,900	3,376,405	3,443,848	7,032,153	356,004,168
1918.....	403,761	3,977,311	3,564,542	7,945,614	401,942,402
1919.....	354,725	4,934,369	3,979,956	9,269,050	416,512,010
1920.....	406,033	5,870,668	4,455,293	10,731,994	448,273,642
1921.....	502,488	5,451,899	4,524,647	10,479,034	484,669,451
1922.....	487,755	8,304,858	4,986,933	13,779,546	568,068,752
1923.....	506,089	7,885,763	8,591,312	16,983,164	581,780,611
1924.....	509,207	9,000,729	9,650,794	19,160,730	628,565,093

TABLE III.—Central Electric Stations, 1924.

—	Prince Edward Island	Nova Scotia	New Brunswick	Total
Capital invested.....	\$ 509,207	\$ 9,000,729	\$ 9,650,794	\$ 19,160,730
Gross revenue.....	\$ 136,905	\$ 2,351,449	\$ 1,559,307	\$ 4,047,661
Number of employees.....	29	449	277	755
Salaries and wages.....	\$ 29,320	\$ 494,924	\$ 325,062	\$ 849,306
Installation—				
Hydraulic.....	h.p.	279	16,944	23,485
Steam engines.....				
Steam turbines.....	h.p.	1,598	20,978	12,573
Internal combustion engines.....				
Total.....	h.p.	1,877	37,922	36,058
Output.....	k.w.hrs.	1,555,000	39,106,000	39,967,000
Number of customers.....		3,717	40,315	27,759
Domestic light.....		3,061	31,667	21,955
Commercial light.....		586	7,345	5,040
Power.....		70	1,303	764

## Part 7. Manufactures

Manufacturing stands second to agriculture in the Maritime Provinces in the net value of production. The Census of Industry of these provinces for 1924, conducted by the Bureau of Statistics, included 2,325 establishments, representing a total capital investment of \$199,530,935, employing 34,455 persons who received as salaries and wages a total of \$24,960,978. The gross value of products amounted to \$135,749,992. The cost of materials entering into manufactures was \$81,715,817, leaving the net value of manufacturing production in the three Maritime Provinces of Canada at \$54,034,175. Fuel consumed in manufacturing represented a value of \$4,918,650. The figures are given by provinces in Table I.

TABLE I.—Principal statistics of Manufactures for 1924 by Provinces.

—	Prince Edward Island	Nova Scotia	New Brunswick	Total
Establishments.....	No.	313	1,166	846
Capital.....	\$	2,637,844	108,535,273	88,357,818
Employees (a).....	No.	2,271	16,132	16,052
Salaries and wages.....	\$	548,496	11,557,213	12,855,269
Cost of fuel.....	\$	94,413	2,943,309	1,880,928
Power.....	h.p.	4,872	188,095	130,359
Cost of materials.....	\$	2,281,398	38,930,734	40,503,685
Gross value of products.....	\$	3,720,874	64,573,092	67,456,026
Net value of products.....	\$	1,439,476	25,642,358	26,952,341

(a) Including outside piece-workers.

In Table II, statistics are given of the ten leading industries in each of the Maritime Provinces during the calendar year 1924, the industries being ranked in descending order according to the value of their product. The percentage of the total value of production in each province represented by these industries was approximately as follows: Prince Edward Island 83 p.c., Nova Scotia 48 p.c., New Brunswick 58 p.c. It will be noted that none of the industries of Prince Edward Island reach a product of over a million dollars, whilst all ten industries in the other provinces are above that figure.

TABLE II.—The ten Leading Industries of each Province, 1924.

Industries	Establishments	Capital	Employees	Salaries and wages	Cost of materials	Value of products
	No.	\$	No.	\$	\$	\$
<i>Prince Edward Island</i>						
Butter and cheese.....	33	189,359	95	55,113	778,283	951,929
Fish curing and packing.....	149	276,930	1,668	102,158	497,445	769,688
Slaughtering and meat packing (1).....	1	—	—	—	—	—
Flour and grist-mill products.....	22	112,135	22	8,775	169,914	201,489
Castings and forgings.....	3	346,950	63	63,430	54,996	171,408
Tobacco, chewing, smoking, etc.....	3	81,163	39	34,006	68,054	156,231
Printing and publishing.....	3	234,029	75	57,085	26,783	139,990
Electric light and power.....	11	509,207	28	29,320	—	136,905
Sawmills.....	42	126,679	33	14,922	67,602	126,667
Bread and other bakery products.....	5	50,450	19	14,616	48,659	94,228
Total all industries.....	313	2,637,844	2,271	548,496	2,281,398	3,720,874
<i>Nova Scotia</i>						
Sugar, refined (1).....	1	—	—	—	—	—
Steel products, rolled iron, ferro-alloys, pig iron, etc. ....	4	16,577,765	1,303	937,383	6,618,617	6,949,982
Petroleum (1).....	1	—	—	—	—	—
Fish curing and packing.....	246	3,488,807	3,359	880,656	3,568,215	5,222,492
Sawmills.....	348	3,557,927	1,565	815,122	2,033,036	3,705,011
Biscuits and confectionery.....	11	1,935,245	1,116	752,452	1,694,418	3,159,883
Railway rolling stock.....	3	5,354,438	488	561,008	2,081,156	3,124,310
Electric light and power.....	60	9,000,729	444	494,924	—	2,351,449
Butter and cheese.....	28	664,007	196	169,164	1,555,602	2,006,597
Printing and publishing.....	32	1,397,001	548	672,222	323,369	1,652,006
Total all industries.....	1,166	108,535,273	16,093	11,553,900	38,930,734	64,573,092

(1) Statistics of individual industries cannot be given.

New Brunswick						
	202	22,637,689	4,502	3,513,093	10,264,961	17,095,506
Sawmills.....	202	22,637,689	4,502	3,513,093	10,264,961	17,095,506
Sugar, refined (1).....	1	—	—	—	—	—
Pulp and paper.....	5	21,127,611	1,241	1,479,152	3,612,889	7,697,234
Cotton yarn and cloth.....	4	5,348,674	1,797	1,263,883	2,179,061	4,197,298
Biscuits and confectionery.....	12	2,043,149	668	536,919	1,403,368	2,562,383
Coffee and spices.....	5	1,422,290	173	229,324	1,771,577	2,298,271
Fish, preserved.....	195	1,681,091	2,130	284,070	1,379,861	2,210,403
Electric light and power.....	37	9,650,794	277	325,062	—	1,559,307
Boots and shoes.....	5	990,059	451	412,343	700,820	1,430,457
Butter and cheese.....	34	611,958	147	142,905	809,868	1,179,954
Total all industries.....	846	88,357,818	15,805	12,812,718	40,503,685	67,456,026

(1) Statistics of individual industries cannot be given.

*Historical.*—The general trend of manufacturing in the Maritime Provinces since Confederation is illustrated by Table III, which is based on the decennial Censuses of 1871 to 1911, and on the Industrial Censuses of 1921 and 1924. In Table IV, an enumeration is made of the principal industries in each province in order of importance from decade to decade. It will be seen that while manufacturing has increased in Canada as a whole by, say, twelve times since Confederation, the increase in the Maritimes has been about four times.\*

TABLE III.—Principal Statistics of Manufactures in the Maritime Provinces, 1871-1921.

		Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	Canada
	1871					
Capital invested.....	\$	—	6,041,966	5,976,176	—	77,964,020
Employees.....	No.	—	15,595	18,352	—	187,942
Value of products.....	\$	—	12,338,105	17,367,687	—	221,617,773
	1881					
Capital invested.....	\$	2,085,776	10,183,060	8,425,282	20,694,118	165,302,623
Employees.....	No.	5,767	20,390	19,922	46,079	254,935
Value of products.....	\$	3,400,208	18,575,326	18,512,658	40,488,192	309,676,068
	1891					
Capital invested.....	\$	2,257,790	16,804,824	14,260,485	33,323,099	—
Employees.....	No.	4,606	22,628	19,170	46,404	272,033
Salaries and wages.....	\$	644,502	5,269,395	4,744,309	10,658,206	79,234,311
Cost of materials.....	\$	1,490,923	12,545,910	10,837,700	24,874,533	—
Value of products.....	\$	2,879,705	23,634,631	20,103,610	46,617,946	368,696,723
	1901					
Establishments.....	No.	334	1,188	919	2,441	14,650
Capital invested.....	\$	2,081,766	34,586,364	20,741,170	57,409,352	446,916,487
Employees.....	No.	3,804	23,284	22,158	49,246	330,808
Salaries and wages.....	\$	445,998	5,613,571	5,748,990	11,808,559	113,249,350
Cost of materials.....	\$	1,319,058	13,161,077	10,814,014	25,294,149	266,527,858
Value of products.....	\$	2,326,708	28,592,513	20,972,470	46,891,691	481,053,375
	1911					
Establishments.....	No.	442	1,480	1,158	3,080	19,218
Capital invested.....	\$	2,013,365	79,596,341	36,125,012	117,734,718	1,247,583,609
Employees.....	No.	3,762	28,795	24,755	57,312	515,203
Salaries and wages.....	\$	531,017	10,628,955	8,314,212	19,474,184	241,008,416
Cost of materials.....	\$	1,816,804	26,058,315	18,516,096	46,391,215	601,509,018
Value of products.....	\$	3,136,470	52,706,184	35,422,302	91,264,956	1,165,975,639
	1921					
Establishments.....	No.	339	1,208	867	2,414	22,235
Capital invested.....	\$	2,308,216	105,254,364	99,204,791	206,767,371	3,190,026,358
Employees.....	No.	893	14,521	12,441	27,855	456,076
Salaries and wages.....	\$	522,488	14,400,509	10,678,721	25,601,718	518,785,137
Cost of materials.....	\$	2,516,415	41,099,835	32,151,631	75,767,881	1,366,893,685
Value of products.....	\$	3,873,355	77,484,561	55,345,193	136,703,109	2,576,037,029
	1924					
Establishments.....	No.	313	1,166	846	2,325	22,178
Capital invested.....	\$	2,637,844	108,535,273	88,357,818	199,530,935	3,538,813,460
Employees.....	No.	2,271	16,093	15,805	34,169	508,503
Salaries and wages.....	\$	548,496	11,553,900	12,812,718	24,915,114	559,884,045
Cost of materials.....	\$	2,281,398	38,930,734	40,503,685	81,715,817	1,438,409,681
Value of products.....	\$	3,720,874	64,573,092	67,456,026	135,749,992	2,695,053,582

\*The Statistics for 1921 and 1924 are exclusive of certain hand-trades and repair and custom establishments included in the earlier years.

**TABLE IV.**—Industries having a production of over \$100,000 value, in order of importance.*Prince Edward Island*—

1851—Lumbering, Fish Canning and Curing.  
 1861—Lumbering, Fish Canning and Curing, Flour Milling.  
 1871—Lumbering, Fish Canning and Curing, Flour Milling, Ship and Boat Building.  
 1881—Fish Canning and Curing, Lumbering, Flour Milling, Ship and Boat Building.  
 1891—Flour Milling, Meat Packing, Lumbering, Fish Canning and Curing, Carriages.  
 1901—Dairying, Fish Canning and Curing, Foundry Castings and Forgings, Planing Mills.  
 1911—Fish Canning and Curing, Dairying, Flour Milling, Lumbering, Planing Mills.  
 1921—Meat Packing, Dairying, Fish Canning and Curing, Flour Milling, Planing Mills, Foundry Castings and Forgings.

*New Brunswick*—

1851—Lumbering, Fish Canning and Curing, Flour Milling.  
 1861—Lumbering, Fish Canning and Curing, Ship and Boat Building.  
 1871—Lumbering, Fish Canning and Curing, Leather Tanneries, Flour Milling.  
 1881—Lumbering, Fish Canning and Curing, Sugar Refining, Leather Tanning, Flour Milling.  
 1891—Lumbering, Cottons, Foundry Castings and Forgings, Flour Milling, Sugar Refining, Fish Canning and Curing, Boots and Shoes.  
 1901—Lumbering, Cottons, Fish Canning and Curing, Leather Tanning, Wood Pulp, Biscuits and Confectionery, Foundry Castings and Forgings, Iron and Steel Products.  
 1911—Lumbering, Cottons, Foundry Castings and Forgings, Fish Canning and Curing, Flour Milling, Biscuits and Confectionery, Wood Pulp, Iron and Steel Products.  
 1921—Sugar Refining, Lumbering, Cottons, Wood Pulp, Biscuits and Confectionery, Fish Canning and Curing, Boots and Shoes, Electric Power, Wire Goods, Foundry Castings and Forgings, Flour Milling, Planing Mills, Meat Packing.

*Nova Scotia*—

1851—Lumbering, Fish Canning and Curing, Ship Building, Flour Milling.  
 1861—Lumbering, Fish Canning and Curing, Ship Building, Flour Milling.  
 1871—Lumbering, Fish Canning and Curing, Ship and Boat Building, Flour Milling.  
 1881—Lumbering, Fish Canning and Curing, Ship and Boat Building, Sugar Refining, Flour Milling, Leather Tanning.  
 1891—Lumbering, Sugar Refining, Fish Canning and Curing, Ship and Boat Building, Foundry Castings and Forgings, Boots and Shoes, Flour Milling, Smelting, Leather tanning, Furniture, Carriages.  
 1901—Smelting, Iron and Steel Products, Fish Canning and Curing, Lumbering, Sugar Refining, Clothing, Boots and Shoes, Biscuits and Confectionery, Cottons, Foundry Castings and Forgings, Planing Mills.  
 1911—Iron and Steel Products, Sugar Refining, Lumbering, Fish Canning, and Curing, Foundry Castings and Forgings, Planing Mills, Biscuits and Confectionery, Boots and Shoes, Cottons, Cordage, Flour Milling.  
 1921—Iron and Steel Products, Petroleum Refining, Sugar Refining, Fish Canning and Curing, Lumbering, Railway Rolling Stock, Biscuits and Confectionery, Foundry Castings and Forgings, Electric Power Plants, Dairying, Knitting Mills, Fertilizer, Planing Mills, Wood Pulp, Boilers and Engines, Cooperage.

## APPENDIX TO CHAPTER III.

## Labour Organization in the Maritime Provinces—Trade Disputes.

No special or extended treatment is possible here of labour in its organized capacity in the Maritime Provinces, though the subject forms one of the most interesting chapters in the annals of Canadian trade unionism. In the Provincial Workmen's Association, Nova Scotia saw the rise of a purely indigenous organization, racy of the soil, which won its way to a position of marked influence by a prolonged and bitter struggle with the dominant international type of labour organization in Canada, only to be displaced by another exponent of the latter principle. Though not without great local significance, the history of these events is best treated as an incident of the general record of trade unionism in Canada. The student may be referred to "Canada and Its Provinces," Volume I, Section II ("The Labour Movement in Canada"), for the leading facts in their general setting. Assembled herewith (Table I), are the main statistics of labour organizations in the Maritime Provinces, in so far as they are available, i.e. since 1911—also the leading statistics of trade disputes since 1901 (Table II). Brief comments on these tables follow:—

*Recent Progress in Labour Organizations.*—According to returns furnished annually to the Department of Labour by local trade unions, organized labour attained its greatest numerical strength in the Maritime Provinces during 1919, whereas 1920 was the "peak" year in other parts of the Dominion. Nova Scotia unions reported 20,067 members and New Brunswick 12,133 members in 1919, from which there were declines of 10 p.c. and 12 p.c., respectively, in 1920, while in Canada as a whole there was an increase of 8 p.c. in the membership reported by the locals furnishing data.

Between 1919 and 1925, there were declines of approximately 42 p.c. and 49 p.c., in the reported membership of local organizations in Nova Scotia and New Brunswick, respectively, as compared with an 18 p.c. drop in Canada. The subjoined statement shows that the reduction was most severe in unions other than mine workers; the latter's loss was comparatively slight. More specifically, there was a general decrease of 44.6 p.c. in the reported membership of local trade unions in Nova Scotia and New Brunswick during the last seven years, but of only 17.7 p.c. in the membership of District 26. In connection with this decline, it is worthy of note that the production of coal in the two provinces was 5,899,481 short tons in 1919 and 5,774,562 in 1924. As this was a loss of only 2 p.c., it may be inferred that the productivity of mine workers has increased, perhaps to some extent as a result of improved machinery and methods. The figures of unemployment given below among the members of reporting unions of mine workers in Nova Scotia and New Brunswick also throw light upon the industrial conditions in the coal areas; the averages exclude unemployment due to industrial disputes, sickness, etc.

Year	Reported membership of trade unions in Nova Scotia and New Brunswick	Membership of District 26, U.M.W. (Nova Scotia and New Brunswick)	Percent of unemployment reported by unions of mine workers in Nova Scotia and New Brunswick (average for year)
1919.	32,200	13,365	1.2
1920.	28,677	12,200	0.6
1921.	17,550	13,000	9.8
1922.	18,133	13,000	7.6
1923.	19,688	13,500	2.7
1924.	20,989	12,000	5.4
1925.	17,850	11,000	8.6

*Trade Disputes.*—The Department of Labour has maintained a record of industrial disputes since 1901. For Nova Scotia, this shows that no less than 4,290,640 working days have been lost through strikes in the last 25 years, an average of 171,626 working days per year. During the same period the aggregate number of days lost in industrial disputes in Canada was 24,862,845, of which Nova Scotia, with 5.96 p.c. of the Dominion's population in 1921, reported 17.3 p.c. The effect of so heavy a time loss in a province whose population varied between 459,574 in 1901

and 523,837 in 1921 is evidently far-reaching. A large proportion of the recorded unrest was of course in the mining industry, which in 1911 ranked third in the number of male workers employed in Nova Scotia, yielding place only to agricultural and factory employees.

New Brunswick reported a total time loss of 421,334 working days, or 1.7 p.c. of the total for Canada, while in Prince Edward Island, 0.01 p.c. of the total loss took place. The Maritime Provinces together have reported 18.95 p.c. of the total days lost in industrial disputes throughout the Dominion.

For a description of the more recent phases of the prolonged unrest in the coal fields and in the iron and steel industry of Nova Scotia, which in the end reached an intensity almost unparalleled previously in Canada, see the Report of the Provincial Royal Commission on the Coal Mining Industry in Nova Scotia, 1925.

TABLE I.—Local Trade Unions in the Maritime Provinces, 1911-1925.

Year	Nova Scotia				New Brunswick				Prince Edward Island			
	Number of Unions		Membership		Number of Unions		Membership		Number of Unions		Membership	
	In province	Reporting membership	Reported in province	P.c. to total reported for Canada	In province	Reporting membership	Reported in province	P.c. to total reported for Canada	In province	Reporting membership	Reported in province	P.c. to total reported for Canada
1911.....	142	69	7,331	7.1	74	44	3,849	3.7	10	5	533	0.5
1912.....	136	51	6,065	5.0	83	52	5,447	4.5	9	8	670	0.6
1913.....	118	63	4,394	3.4	91	54	4,619	3.6	10	7	584	0.5
1914.....	125	49	5,434	5.6	93	40	3,365	3.4	11	8	543	0.6
1915.....	107	52	4,428	4.9	87	55	4,509	5.0	10	6	472	0.5
1916.....	100	61	5,947	5.1	80	50	6,976	6.0	8	7	568	0.5
1917.....	116	56	8,630	6.1	82	43	3,859	2.7	7	6	650	0.5
1918.....	128	92	18,058	8.7	90	70	7,944	3.8	7	5	276	0.1
1919.....	157	114	20,067	8.4	124	85	12,133	5.1	8	7	683	0.3
1920.....	167	110	18,037	6.9	142	86	10,640	4.1	10	8	455	0.2
1921.....	151	79	10,476	5.4	127	67	7,074	3.6	10	5	261	0.1
1922.....	147	82	12,716	7.1	114	60	5,417	3.0	9	5	328	0.2
1923.....	134	93	12,554	6.7	114	74	6,734	3.5	10	5	326	0.2
1924.....	126	94	14,258	7.0	106	76	6,731	3.3	11	8	412	0.2
1925.....	131	90	11,608	5.9	105	73	6,242	3.2	11	10	534	0.3

TABLE II.—Trade Disputes in the Maritime Provinces, 1901-1925.



## CHAPTER IV.—TRADE AND TRANSPORTATION

### 1. Maritime Trade prior to Confederation

Prior to Confederation the Maritime Provinces were largely self-contained. Though the crises of 1848 and 1854 were felt, especially in New Brunswick, those of 1837 and 1857 were without serious effect. From a condition of stagnation, noted by Lord Durham, the colonies emerged into one of considerable industrial and trade activity during the fifties, assisted to some extent by the Crimean War, and more especially by the reciprocity treaty with the United States and the American Civil War. This continued without material abatement over most of the sixties, though the 1871 Census does not show as great a relative advance during the preceding decade as does that of 1861. Agriculture, the fisheries, lumbering and coal mining were the basic sources of wealth. Most of the exports of the Maritimes went to the United States and the West Indies, whilst Great Britain supplied them with the hardware, clothing and general manufactures, which (with sugar, rum, tobacco, etc., from the West Indies and the United States), made up the bulk of their imports. With the Canadas, trade was restricted to a small export of fish and coal, but there were considerable imports of flour in bond through the United States. The average pre-Confederation tariff in Nova Scotia was 10 p.c., in Prince Edward Island 11 p.c., and in New Brunswick somewhat under 15 p.c.

A summary of the foreign trade of Nova Scotia, New Brunswick and Prince Edward Island prior to Confederation, back to 1850, compiled from the Blue Books of these Colonies, is presented in the accompanying table (Table I).\*

It will be noted from the table that a persistent excess of imports over exports prevailed in this period in all three colonies. Altogether this excess during the 18 years from 1850 to 1867 inclusive amounted to \$101,973,881. It should be pointed out, however, in considering this figure, that the export returns do not include wooden ships, one of the most considerable industries of the Maritime Provinces in these years, the sale of which was chiefly in Great Britain, though the imports include certain rigging and sails which went into the manufacture of these vessels. In 1866 alone, New Brunswick launched 118 new ships, Nova Scotia 300, and Prince Edward Island 127, with an aggregate tonnage of 132,382, valued at \$5,401,060. Doubtless the prosperity of the shipbuilding trade at this time was partly due to the decline of the American merchant marine as a consequence of the Civil War. The imports and exports of Ontario and Quebec during these years similarly showed an excess of imports over exports, the excess for the 18 years amounting to \$134,153,727.

Trade conditions in the Maritimes changed abruptly in 1866 with the abrogation of the Reciprocity Treaty with the United States, which closed their most important market. Some index of the severity of the blow may be seen in the figures for 1867 compared with those of 1865 and 1866 in Table I. The coal, lumber and fish trades were especially affected. Confederation, which followed in 1867, with the building of the Intercolonial and the establishment of a considerably larger trade with the Canadas, undoubtedly was of assistance in mitigating the abrogation of reciprocity, though the interaction of the two forces with the adoption of the general Canadian tariff is difficult, if not impossible, of measurement. The local trade of certain strategic distributing centres, including Halifax, was at the same time disturbed.

The student desirous of obtaining within convenient space a purview of Maritime trade, by countries and leading commodities, at a typical pre-Confederation date, may consult the report on intercolonial reciprocity made by Hon. W. P. Howland, Canadian Minister of Finance in 1862. Several trade tables are included, together with the tariffs of the colonies (*see Sessional Papers, Province of Canada, 1863*).

\*These figures are given with reservation, owing to the imperfect manner in which trade records were maintained in the early colonies; they are considerably at variance in places with the corresponding import and export records of the United States and Great Britain, with whom the bulk of the trade was transacted.

TABLE I.—Statement of Total Imports and Exports of Nova Scotia, New Brunswick and Prince Edward Island, showing Balances of Trade, 1850 to 1868.

Years	Nova Scotia			New Brunswick			Prince Edward Island			Maritime Provinces		
	Imports into	Exports from	Excess Imports over Exports	Imports into	Exports from	Excess Imports over Exports	Exports from	Imports into	Excess Imports over Exports	Exports from	Imports into	Excess Imports over Exports
1850.....	3,600,000	1,550,000	2,050,000	2,077,655	3,290,090	787,565	630,480	325,992	304,488	8,308,135	5,166,082	3,142,053
1851.....	3,741,933	1,569,245	2,142,688	4,901,500	3,860,120	1,04,380	669,410	343,022	326,388	9,312,843	5,802,387	3,510,456
1852.....	7,085,431	3,033,360	4,051,841	5,553,005	3,981,675	1,571,330	859,855	531,285	328,570	13,498,291	7,546,550	5,951,741
1853.....	5,970,878	4,833,903	1,116,975	8,580,640	5,362,495	3,218,045	1,053,390	636,735	416,655	15,604,808	10,853,153	4,751,675
1854.....	8,955,410	6,238,340	2,717,070	10,343,865	5,521,075	4,822,790	1,369,645	756,467	613,578	20,608,920	12,515,482	8,153,438
1855.....	9,413,515	7,832,855	1,580,660	7,156,650	4,131,705	3,024,745	1,342,030	735,573	606,457	17,912,195	12,700,333	5,211,862
1856.....	9,349,160	8,864,790	7,484,370	7,605,890	5,366,755	2,239,135	1,426,260	671,881	754,379	18,381,310	12,903,426	5,477,884
1857.....	9,680,880	6,967,830	2,713,050	7,094,715	4,588,875	2,505,840	1,293,640	672,325	621,315	18,069,235	12,229,030	5,840,205
1858.....	8,075,590	6,321,490	1,754,100	5,813,855	4,053,895	1,759,960	931,145	765,355	165,790	14,820,390	11,140,740	3,679,850
1859.....	8,100,955	8,889,130	1,211,825	7,080,170	5,367,110	1,713,060	1,173,490	893,400	280,090	16,354,615	13,149,640	3,204,975
1860.....	8,511,549	6,619,534	1,892,015	7,235,700	4,581,860	2,651,840	1,150,270	1,007,171	143,099	16,805,519	12,208,565	4,686,954
1861.....	7,613,227	5,774,334	1,838,893	5,943,639	4,546,639	1,397,000	1,049,678	815,571	234,107	14,605,944	11,135,944	3,470,000
1862.....	8,445,042	5,646,961	2,738,081	6,199,701	3,856,538	2,343,163	1,056,205	752,745	303,460	15,700,948	10,256,244	5,444,704
1863.....	10,201,391	6,546,488	3,634,903	7,658,462	4,940,781	2,717,681	1,467,156	1,047,362	419,794	19,327,009	12,534,631	6,792,378
1864.....	12,604,642	7,172,816	5,431,826	8,945,352	5,053,879	3,891,473	1,689,638	1,013,340	676,298	23,239,652	13,240,035	9,999,597
1865.....	14,381,662	8,530,693	5,550,969	7,036,395	5,534,726	1,251,869	1,905,075	1,457,727	447,348	23,373,332	15,823,146	7,550,186
1866.....	14,381,008	8,043,095	6,337,713	10,000,794	6,373,705	3,627,089	2,162,435	1,915,541	246,894	26,544,237	16,332,341	10,211,896
1867.....	(b) 9,345,490	(b) 5,474,328	3,871,162	(a) 3,820,167	(a) 2,407,889	1,412,278	1,472,168	1,861,581	(c)	14,637,825	9,745,798	4,894,027

(a) Six months ended June 30.

(b) Nine months ended June 30.

(c) Excess Exports over Imports \$389,413.

## 2. Trade through Maritime Ports since Confederation

A record of imports and exports by provinces in continuation of the above subsequent to Confederation is not available. Trade between the Maritime Provinces themselves and between the Maritimes and Ontario and Quebec ceased to be recorded after 1867. The statistics obtained by adding together the port returns within each province (which are frequently used as a measure of "provincial" trade), include in the case of exports certain goods originating in Canada outside the province, and in the case of imports certain goods not destined for consumption within the province. It is difficult, therefore, if not impossible, to compare the trade of the Maritimes before Confederation and afterwards. In Table II, however, the totals of port entries are brought together at five-year intervals for their general significance, though, as just said, this significance pertains rather to transportation and the volume of port business than to provincial trade. In addition, from the same point of view, a table showing total imports and exports year by year since 1890 through Halifax, St. John, Quebec, Montreal, and Vancouver, is given (Table III), for special comparative purposes.

Immediately following Confederation, trade with Ontario and Quebec increased, it is estimated, by 100 per cent, and in the next three years made still further gains, though these were only a fraction of the loss of U.S. trade, which is estimated to have declined by nearly one-half. It was not in fact for several years that the trade of the Maritimes with Ontario and Quebec became considerable. During the later seventies depression prevailed, special factors in which were the disappearance of the wooden shipbuilding industry, the failure of the carrying enterprises which many of the shipbuilding concerns had undertaken with insufficient experience, unsettled trade conditions in the West Indies, and the prevailing low prices for lumber. It may be noted that trade with Prince Edward Island, which did not enter Confederation until 1873, likewise declined following the abrogation of reciprocity. The post-Confederation declines in the other provinces were particularly noticeable in exports. Considerable declines in imports through Maritime ports were also noted following the tariff legislation of 1878, though coal exports increased. (See also pp. 92-93 hereunder).

TABLE II.—Trade through Maritime Ports since Confederation.

Years	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritime Provinces	Total Canada
<i>Imports</i>					
1870.	1,928,662	8,008,031	6,532,827	16,469,520	73,166,265
1875.	1,983,419	10,672,981	9,853,652	22,510,052	119,618,657
1880.	799,287	6,138,938	3,996,698	10,934,923	71,782,349
1885.	778,444	8,192,381	6,124,264	15,095,089	102,710,019
1890.	585,859	9,304,148	6,620,394	16,510,401	112,765,584
1895.	530,713	8,991,559	4,528,564	14,050,836	105,252,511
1900.	506,374	10,369,943	6,580,895	17,457,212	180,804,316
1905.	590,371	12,385,520	8,100,033	21,075,924	261,925,554
1910.	655,202	14,121,615	10,743,781	25,520,598	375,833,016
1915.	930,467	16,257,305	12,736,708	29,924,480	587,439,304
1920.	1,014,875	33,057,422	33,869,948	67,942,245	1,064,528,123
1925.	930,719	22,068,108	25,702,617	48,701,444	796,932,537
<i>Exports</i>					
1870.	2,154,203	5,803,417	5,303,206	13,260,826	75,727,693
1875.	1,308,461	6,979,130	6,543,056	14,830,647	77,886,979
1880.	1,736,533	7,543,684	5,863,955	15,144,172	87,911,458
1885.	1,494,469	8,894,085	6,489,293	16,877,847	89,238,361
1890.	887,755	9,468,409	6,977,855	17,334,019	96,749,149
1895.	1,039,493	11,723,534	6,368,657	19,131,684	113,638,803
1900.	1,349,529	12,608,973	14,165,506	28,124,008	191,894,723
1905.	654,512	15,289,772	17,930,703	33,874,987	203,316,872
1910.	441,836	19,557,188	32,110,811	52,109,835	301,358,529
1915.	542,087	29,712,618	54,322,490	84,577,195	490,808,877
1920.	326,442	78,029,938	141,874,056	220,230,436	1,286,658,709
1925.	579,156	43,940,356	78,251,919	122,771,431	1,081,361,643

NOTE.—Observe the decline of the proportion of our exports going out through the Maritimes from 17 per cent in 1910, 1915 and 1920 to 11 per cent in 1925.

TABLE III.—Total Value of Imports and Exports via Principal Canadian Sea and River Ports, Fiscal Years 1905 to 1926.

Fiscal Years	Via Halifax N.S.	Via Montreal Que.	Via Quebec Que.	Via St. John N.B.	Via Vancouver B.C.
<i>Imports</i>	\$	\$	\$	\$	\$
1905.....	7,728,027	76,332,640	8,860,273	5,560,764	6,106,952
1906.....	8,867,759	80,821,740	9,136,774	6,352,339	8,193,647
1907 (9 months).....	6,298,692	72,098,846	7,818,059	5,611,180	6,654,828
1908.....	8,811,494	95,326,862	12,845,550	7,354,202	13,056,069
1909.....	8,608,396	79,329,078	8,603,370	6,305,629	11,723,640
1910.....	8,743,255	94,573,491	10,012,035	7,349,763	17,265,068
1911.....	9,890,801	111,424,805	11,270,860	7,732,244	25,250,463
1912.....	11,512,546	135,019,357	11,775,466	8,522,548	32,505,431
1913.....	12,196,236	145,629,791	14,719,547	9,845,221	43,475,412
1914.....	11,546,554	141,728,705	14,599,652	9,373,675	37,628,156
1915.....	10,709,544	102,198,355	11,801,600	8,847,049	25,055,487
1916.....	9,873,309	129,139,817	11,945,964	11,057,022	19,956,534
1917.....	13,885,665	222,118,617	16,898,120	14,956,948	27,189,375
1918.....	13,118,337	197,403,279	15,572,070	16,783,567	40,762,996
1919.....	15,071,155	186,311,914	19,360,371	15,701,479	46,736,318
1920.....	20,532,135	246,898,636	19,951,075	26,990,916	49,256,913
1921.....	24,749,731	286,597,463	26,663,862	32,857,033	64,731,912
1922.....	13,476,769	167,812,273	16,629,548	21,369,385	48,235,845
1923.....	16,956,623	173,938,311	14,332,753	20,637,800	46,965,214
1924.....	17,051,617	191,867,086	16,240,993	20,622,689	53,808,630
1925.....	15,106,817	171,116,753	14,403,267	19,245,490	53,350,269
1926.....	14,437,382	192,662,398	16,318,355	20,151,989	59,843,051
<i>Exports</i>					
1905.....	8,444,149	59,411,278	3,717,471	13,548,041	5,331,402
1906.....	10,192,631	81,589,542	4,163,567	18,532,039	7,283,155
1907 (9 months).....	6,983,555	70,510,144	4,518,354	13,342,838	3,542,955
1908.....	9,769,143	89,782,587	4,768,403	20,304,281	6,734,726
1909.....	10,015,509	77,199,743	4,838,596	20,668,517	5,848,378
1910.....	11,595,755	77,501,549	5,751,375	24,988,519	7,769,129
1911.....	12,514,420	74,330,938	7,103,300	21,659,514	7,320,425
1912.....	15,857,184	74,944,869	6,641,512	21,895,963	8,148,697
1913.....	15,173,250	85,080,238	8,592,177	25,594,721	11,077,421
1914.....	19,157,170	99,238,107	9,603,192	21,359,760	17,058,893
1915.....	17,247,719	119,349,025	7,310,185	43,872,932	15,172,233
1916.....	26,843,487	191,170,656	3,991,861	120,042,590	15,848,281
1917.....	34,175,832	384,313,755	15,212,135	190,586,561	22,575,907
1918.....	71,428,208	524,365,343	13,331,114	200,783,647	28,488,674
1919.....	41,697,142	396,976,269	9,650,803	149,986,167	37,373,971
1920.....	54,562,947	353,138,249	22,464,945	114,257,976	39,535,283
1921.....	36,669,918	263,743,335	28,799,768	81,440,495	50,049,502
1922.....	24,893,710	159,039,309	12,984,029	49,749,273	42,777,949
1923.....	29,584,386	173,758,813	15,382,000	55,127,568	62,230,665
1924.....	30,822,995	190,282,115	15,960,228	57,326,588	99,001,740
1925.....	30,564,483	192,298,083	11,828,917	58,841,556	105,303,103
1926.....	37,487,283	240,010,515	17,958,019	76,853,203	144,634,857

### 3. Railway Traffic in the Maritime Provinces as an Index of External Trade, 1925

An index of external trade, by provinces, is afforded by the series of monthly railway traffic returns inaugurated by the Dominion Bureau of Statistics in 1921. These returns show all freight loaded and unloaded in each province, classified for seventy different staple commodities. For a province whose entire traffic is handled by rail the difference between freight loaded and unloaded in these statements is presumably of the nature of an import into or export from the province, and some valuable deductions as to the province's trade relations are thus available. In the case of the Maritime Provinces, however, the validity of the figures is

impaired by the fact that no similar records are available for goods handled by water carriers. It is therefore impossible to arrive at definite conclusions regarding net imports and exports. Nevertheless the following résumé and table (Table IV) of railway traffic may be of interest, though they cover only the past five years.

During 1925 the freight loaded on cars at stations in the Maritime Provinces amounted to 6,588,100 tons and the freight unloaded to 5,347,620 tons. The largest single item was 2,995,017 tons of bituminous coal loaded and 2,741,666 tons unloaded. About two thirds of this was for local consumption; the rest was reloaded on vessels for Quebec, Newfoundland and other points. Potatoes loaded amounted to 299,593 tons, apples 87,717 tons, practically all for outside points, and hay and straw 60,547 tons, mostly for local points; other agricultural products were of lesser importance. Animal products loaded amounted to 30,689 tons, the principal items being horses, 3,053 tons, and cattle and calves, 7,141 tons, which were for local delivery. Sheep loaded were 4,275 tons, of which 2,396 tons were unloaded within the provinces. Eggs showed an export of 1,004 tons, 1,516 tons being loaded and 512 tons being unloaded; these included carload shipments only. The heavy imports were dressed meats, 2,407 tons loaded and 15,459 tons unloaded, and other packing house products, 328 tons loaded and 6,300 tons unloaded. In the mine products group, besides bituminous coal, the only large items were clay, gravel, sand and crushed stone, 153,272 tons loaded and 168,505 tons unloaded; undoubtedly the bulk of this was for local use for the construction of roads and buildings. Of coke, 28,417 tons were loaded and 27,541 tons unloaded, and of other mine products 32,252 tons were loaded and 31,439 tons unloaded.

The heaviest exports via rail were forest products, lumber heading the list with 1,070,405 tons loaded and 291,663 tons unloaded, or an export of 778,752 tons. Pulpwood came next with 327,885 tons loaded and 163,939 tons unloaded, or an export of 163,946 tons; logs, posts, and cordwood showed 63,435 tons exported. Wood pulp among manufactured products recorded 159,379 tons loaded and 31,064 tons unloaded, or 128,315 tons exported. Other heavy exports were sugar, 121,236 tons loaded, 33,565 tons unloaded, or 87,671 tons exported; lime and plaster 59,330 tons loaded, 24,275 tons unloaded, or 35,055 tons exported; fish (fresh, frozen, cured) 42,443 tons loaded, 13,817 tons unloaded, or 28,626 tons exported. Iron, pig and bloom, showed 11,511 tons exported by rail, and paper 11,433 tons.

The imports via rail in manufactured goods were, cement 2,502 tons loaded, 38,544 tons unloaded, 36,042 tons imported; fertilizers 44,925 tons loaded, 70,550 tons unloaded, 25,625 tons imported; automobiles 16,248 tons imported, and merchandise 64,527 tons imported. These figures, to repeat, are railway data alone and do not include commodities forwarded by water. Total car loadings and unloadings, and net imports and exports via rail, 1921-1925, are shown in the attached table. (Table IV).

Comparison of 1925 traffic with that of 1923, the heaviest of these five years, shows the largest decrease to be in loadings of bituminous coal, which amounted to 5,139,452 tons in 1923 as against 2,995,017 tons in 1925. Iron and steel products also showed decreases as follows: iron, pig and bloom 71,201 tons, rails and fastenings 38,922 tons, bar sheet iron, structural iron and iron pipe 51,577 tons, castings, machinery and boilers 11,927 tons—the total loadings for these four commodity groups being 280,325 tons in 1923 and 106,698 tons in 1925. Lumber decreased from 1,190,803 tons in 1923 to 1,070,405 tons, and the total for forest products was less by 202,680 tons. Wood pulp, however, showed increased loadings of 28,782 tons and paper of 12,991 tons. Canned goods, other than canned meats, fell off by 8,635 tons, whereas general merchandise increased by 56,327 tons. The increase in agricultural products of 55,780

tons was more than made up of heavy loadings of potatoes which totalled 299,593 tons in 1925 compared with 194,957 tons in 1923, or an increase of 104,636 tons. Oats were approximately the same; flour decreased by 7,506 tons, hay and straw by 15,704 tons, and apples by 36,780 tons.

TABLE IV.—Railway Revenue Freight Tonnages, 1921-1925

Year	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritime Provinces	Total Canada
<i>Freight Loaded on Cars</i>					
1921.....	92,411	5,522,678	1,960,579	7,575,668	55,743,986
1922.....	102,536	5,588,797	2,214,018	7,905,351	62,273,169
1923.....	95,263	6,502,523	2,425,470	9,023,256	68,962,401
1924.....	112,375	5,907,140	2,385,135	8,404,650	65,148,937
1925.....	138,231	4,173,591	2,276,278	6,588,100	66,714,207
<i>Freight Unloaded from Cars</i>					
1921.....	113,535	4,945,004	1,453,379	6,511,918	58,940,963
1922.....	170,116	5,024,047	1,467,871	6,662,034	62,548,578
1923.....	160,045	5,851,439	1,513,587	7,525,071	73,134,032
1924.....	154,364	5,282,205	1,530,694	6,967,263	65,972,558
1925.....	165,457	3,613,308	1,568,855	5,347,620	67,303,255
<i>Net Imports (+) Net Exports (-) Via Railways</i>					
1921.....	+ 21,124	- 577,674	- 507,200	-1,063,750	-
1922.....	+ 67,580	- 564,750	- 746,147	-1,243,317	-
1923.....	+ 64,782	- 651,084	- 911,883	-1,498,185	-
1924.....	+ 41,980	- 624,935	- 854,441	-1,437,387	-
1925.....	+ 27,226	- 560,283	- 707,423	-1,240,480	-

#### 4. Shipping

A record of the number and tonnage of steam and sailing vessels entered inwards and outwards is available annually by ports back to Confederation, the 1923 report including some eighty-five individual places in the Maritime Provinces. In reducing this record to measurable proportions, an examination was made of the reports for 1870, 1900 and 1923, and the more important ports selected, in order that in computing the general trend, ports of present importance but unknown many years ago should not be included at the expense of others more prominent in former years. The tonnages entered and cleared by ten-year periods for these selected

ports were then tabulated, (see Table V), the record for 1924 and 1925 being added. Provincial totals of the tonnages entered and cleared at these ports were also made up,§—also the statistics for Quebec, Montreal, Vancouver and Victoria for purposes of comparison. A more inclusive statement for 1925 is added (Table VI).

In 1870, tonnages entered and cleared at the port of Halifax totalled 311,357 and 275,062 respectively. Similar figures for the port of Montreal for the same year totalled 228,121 and 243,167, while the port of Quebec showed 756,078 and 674,894 respectively. From this it will be seen that in 1870 Halifax in point of tonnage was of more than equal importance with Montreal, but of less importance than the city of Quebec. Traffic via the Pacific ports of Canada was at this time, of course, in its infancy. Since that time, Montreal has achieved the leading position as the grain shipping port of America, outdistancing even the port of New York in this trade, and handling a considerable quantity of United States grain as well as grain of Canadian origin, in addition to large amounts of other freight originally produced in the United States (e.g.—packing-house products). Similarly, the port of Vancouver has recorded phenomenal development, not only as an exit for Canadian grain, but for lumber, fish and other commodities. With the extraordinary development of these channels of trade, the comparative increase along these routes far outstrips the average increase in the total shipping trade of Canada. As a corollary, trade through other channels (e.g.—Maritime Provinces) shows a relatively smaller increase\*.

Taking tonnages cleared during 1870 as equal to 100, tonnages cleared in 1925 showed an increase to 828.26. (See Table VII). Clearances for the selected ports in Nova Scotia increased to 590.35, and in New Brunswick to 196.52.

Charlottetown and Summerside were selected as the representative ports in Prince Edward Island; in 1925, clearances at these two ports totalled 59.83 per cent of the total tonnages cleared in 1880.†

In individual cases the development has exceeded the general average for all Canada, Halifax showing 1218.71 in 1925. The similar figure for North Sydney was 995.25. In certain other cases, we have normal conditions during the war, and in the years immediately following a temporary boom. Clearances from Louisburg in 1920 amounted to 3,758.64 per cent of the clearances in 1890 (the first year this port was included in the records), dropping back to 626.93 per cent in 1925. North Sydney clearances amounted to 2,043.13 per cent of the clearances in 1870, dropping to 995.25 per cent in 1925. On the other hand, certain ports seem to have lost their early importance. In this class are Pictou, Port Hawkesbury, Sandy Point in Nova Scotia, and Newcastle and Chatham in New Brunswick. While Summerside totals were never very large, they have become of little importance in the past few years.

§ The selected ports represented about 98 p.c. of total clearances of sea-going vessels outwards.

\* Other factors tending to lessen the importance of Maritime ports have been the substitution of steam vessels for sailing ships and of steel for wooden boats. Larger vessels carrying greater and more diversified cargoes, with the ability to reach river and other ports inaccessible to sailing vessels, extensively modified the channels of water traffic. Simultaneously, the lower freight rates on the water routes have tended in most classes of commodities to force traffic to the longest water and the shortest rail haul. Montreal has been particularly favourably situated in this regard.

† Figures for 1870, of course, were not included in the Canadian records.

TABLE V.—Total tonnages of sea-going vessels entered and cleared from principal Maritime ports during fiscal years ending June 30, 1870, 1880 and 1890.

	1870		1880		1890	
	Entered	Cleared	Entered	Cleared	Entered	Cleared
<i>Prince Edward Island—</i>						
Charlottetown.....	—	—	64,281	68,524	28,718	39,501
Summerside.....	—	—	9,123	12,391	2,361	3,569
Total.....	—	—	73,404	80,915	31,079	43,070
<i>Nova Scotia—</i>						
Amherst.....	17,497	28,817	25,468	29,365	—	—
Annapolis.....	12,342	12,921	20,210	21,418	55,141	56,476
Arichat.....	22,961	2,554	11,983	2,512	13,683	9,805
Baddeck.....	1,999	2,100	2,208	3,350	3,049	9,341
Bridgewater.....	—	—	—	—	4,084	5,825
Canso.....	—	—	—	—	4,084	4,047
Cornwallis.....	17,166	18,326	19,129	20,032	—	—
Cow Bay.....	—	—	—	—	23,621	18,936
Digby.....	14,754	12,024	13,065	11,729	51,344	47,021
Glace Bay.....	—	—	—	—	34,164	21,609
Halifax.....	311,357	275,062	529,663	478,875	682,408	658,340
Hantsport.....	—	—	—	—	15,851	1,000
Joggins.....	—	—	—	—	18,851	18,397
La Have.....	—	—	—	—	10,186	1,893
Liverpool.....	17,514	17,374	8,571	6,206	25,023	25,362
Lockeport.....	—	—	10,635	11,662	10,713	10,178
Louisburg.....	—	—	—	—	6,833	6,929
Lunenburg.....	17,663	22,216	26,572	36,523	23,971	27,760
North Sydney.....	29,084	21,252	87,670	47,868	84,141	58,281
Parrsboro.....	7,583	3,657	14,861	14,065	48,419	48,812
Pictou.....	187,097	162,541	78,282	50,422	38,634	29,615
Port Hastings.....	—	—	—	—	1,786	190
Port Hawkesbury.....	66,880	61,540	37,938	17,738	29,959	22,073
Sandy Point.....	—	—	—	—	—	—
Shelburne.....	1,690	3,550	15,832	9,732	39,721	35,502
Sydney.....	57,330	88,425	63,650	46,175	108,295	155,220
Weymouth.....	18,854	21,620	20,381	21,071	7,541	7,275
Windsor.....	35,544	52,228	59,718	71,963	71,122	67,535
Yarmouth.....	29,809	27,845	30,226	29,127	93,732	90,240
Total.....	867,124	834,052	1,076,062	929,833	1,506,360	1,437,662
<i>New Brunswick—</i>						
Baie Verte.....	2,820	2,796	—	—	17,690	16,146
Bathurst.....	8,818	12,346	12,297	11,572	16,191	15,970
Campbellton.....	—	—	—	—	2,513	13,420
Campo Bello.....	3,485	3,485	3,443	4,872	3,038	2,743
Chatham.....	37,963	44,246	110,499	108,678	76,682	73,553
Dalhousie.....	13,342	16,623	16,940	18,451	22,773	15,176
Dorchester.....	7,347	7,663	6,377	7,472	1,163	375
Grand Manan.....	—	—	—	—	24,480	25,327
Harvey.....	—	—	—	—	2,024	1,570
Hillsboro.....	10,659	12,862	12,770	17,445	17,342	23,980
Moncton.....	979	1,176	1,945	1,717	5,423	5,889
Newcastle.....	28,185	28,982	34,847	30,401	37,910	39,312
North Head.....	—	—	—	—	—	—
Richibucto.....	18,361	22,633	17,754	18,642	18,984	16,618
Shediac.....	47,137	49,334	10,107	8,727	14,687	14,531
St. Andrew's.....	12,994	7,355	100,062	97,120	123,908	121,495
St. George.....	14,300	19,836	3,564	5,033	2,907	2,622
St. John.....	471,297	417,388	462,880	458,880	500,641	504,494
St. Martin's.....	—	—	—	—	—	—
St. Stephen.....	6,556	7,074	8,372	6,587	13,752	10,895
Total.....	684,243	653,799	801,857	795,597	902,108	904,116
Quebec.....	756,078	674,894	675,634	572,562	617,510	439,092
Montreal.....	228,121	243,167	427,057	484,671	603,551	650,414
Vancouver.....	—	—	—	—	277,542	288,884
Victoria.....	—	—	356,649	353,687	662,217	624,182
Total for Canada....	2,608,519	2,476,354	3,487,735	3,298,979	5,215,476	5,112,809

TABLE V.—Total tonnages of sea-going vessels entered and cleared from principal Maritime ports during fiscal years ending June 30, 1900 and Mar. 31, 1911 and 1920.

	1900		1911		1920	
	Entered	Cleared	Entered	Cleared	Entered	Cleared
<i>Prince Edward Island—</i>						
Charlottetown.....	64,055	90,542	48,326	85,863	3,363	4,005
Summerside.....	266	5,521	2,047	9,492	93	—
Total.....	64,321	96,063	50,373	95,355	3,456	4,005
<i>Nova Scotia—</i>						
Amherst.....	—	—	19,237	18,692	—	—
Annapolis.....	15,113	16,896	3,743	11,008	1,735	460
Arichat.....	4,872	2,274	4,776	4,585	1,972	1,776
Baddeck.....	1,624	5,517	2,159	2,294	1,233	14,061
Bridgewater.....	10,223	13,312	24,296	38,129	4,736	6,481
Canso.....	43,297	33,552	44,398	49,826	17,717	17,717
Cornwallis.....	—	—	—	—	—	—
Cow Bay.....	—	—	—	—	—	—
Digby.....	3,346	2,283	22,634	19,953	3,484	5,574
Glace Bay.....	149	—	277	4,383	733	132
Halifax.....	866,989	840,796	1,285,858	1,193,171	1,904,067	2,426,734
Hantsport.....	14,898	7,592	16,393	6,981	26,196	3,194
Joggins Mines.....	—	—	—	—	1,123	2,177
La Have.....	9,691	292	4,591	4,483	12,412	10,937
Liverpool.....	17,202	21,284	23,528	31,032	13,135	27,305
Lockeport.....	8,625	8,041	4,771	4,866	1,645	1,901
Louisburg.....	269,730	271,561	156,067	194,899	287,217	260,436
Lunenburg.....	24,805	24,185	25,695	25,178	33,007	28,347
North Sydney.....	158,255	146,411	270,963	183,337	402,426	434,206
Parrsboro.....	38,747	40,538	47,053	50,327	16,490	27,731
Pictou.....	24,225	21,065	9,501	27,736	4,153	9,249
Port Hastings.....	—	1,770	15,015	18,235	187	3,706
Port Hawkesbury.....	72,698	75,683	53,021	53,233	7,582	7,584
Sandy Point.....	—	—	18,187	20,191	10,241	8,772
Shelburne.....	28,139	24,512	7,374	9,132	3,928	4,728
Sydney.....	217,907	184,924	426,000	388,166	767,107	849,859
Weymouth.....	7,184	9,035	8,677	12,285	1,194	2,216
Windsor.....	53,302	65,695	136,968	152,306	58,830	91,184
Yarmouth.....	253,906	256,711	161,737	154,964	245,018	236,558
Total.....	2,144,927	2,073,929	2,792,919	2,679,392	3,827,568	4,483,079
<i>New Brunswick—</i>						
Baie Verte.....	11,502	12,013	2,971	7,663	—	—
Bathurst.....	22,019	13,441	797	10,730	6,833	10,085
Campbellton.....	3,608	19,052	10,472	44,270	14,972	26,775
Campo Bello.....	20,152	9,679	17,925	22,843	30,819	25,055
Chatham.....	64,720	71,103	65,090	81,785	24,335	41,662
Dalhousie.....	44,694	27,010	36,885	50,781	7,610	18,002
Dorchester.....	5,153	2,426	15,160	5,078	319	319
Grand Manan.....	—	—	—	—	—	—
Harvey.....	16,580	13,252	—	—	—	—
Hillsboro.....	49,875	68,832	28,843	28,882	5,129	11,700
Moncton.....	14,081	12,716	10,006	6,876	3,665	10,861
Newcastle.....	45,116	45,951	14,474	24,702	18,099	19,739
North Head.....	11,400	10,705	23,771	22,253	26,492	28,331
Richibucto.....	8,779	9,262	1,700	4,981	826	—
Shediac.....	14,046	11,186	8,907	5,030	1,874	641
St. Andrew's.....	40,303	36,831	35,085	39,440	34,317	33,959
St. George.....	2,914	2,621	9,164	10,120	7,020	7,435
St. John.....	684,207	529,091	1,232,360	935,822	1,107,806	1,038,404
St. Martin's.....	—	—	18,906	17,416	15,035	15,859
St. Stephen.....	7,318	6,323	19,495	18,763	2,038	1,447
Total.....	1,066,467	901,494	1,552,011	1,337,435	1,307,189	1,290,274
Quebec.....	627,451	461,176	1,851,730	589,769	776,819	442,427
Montreal.....	1,018,902	1,049,411	1,661,370	1,609,337	1,674,666	2,016,355
Vancouver.....	450,252	474,992	1,509,445	1,010,658	1,769,999	1,429,750
Victoria.....	906,631	889,700	1,322,890	1,759,861	1,673,470	2,249,422
Total for Canada...	7,262,721	6,912,400	11,919,339	10,377,847	12,010,374	13,234,830

TABLE V.—Total tonnages of sea-going vessels, entered and cleared from principal Maritime ports during fiscal years ending March 31, 1924 and 1925.

	1924		1925	
	Entered	Cleared	Entered	Cleared
<i>Prince Edward Island—</i>				
Charlottetown.....	23,054	49,941	14,100	48,311
Summerside.....	428	—	428	99
Total.....	23,482	49,941	14,528	48,410
<i>Nova Scotia—</i>				
Amherst.....	—	—	—	—
Annapolis.....	1,505	907	1,552	992
Arichat.....	1,950	958	853	905
Baddeck.....	2,389	11,197	39,921	39,805
Bridgewater.....	2,863	7,478	2,808	9,925
Canso.....	30,994	29,464	22,583	21,955
Cornwallis.....	—	—	—	—
Cow Bay.....	—	—	—	—
Digby.....	6,754	14,848	3,974	8,901
Glace Bay.....	1,105	1,205	1,112	1,285
Halifax.....	2,426,054	2,426,779	3,201,480	3,352,217
Hantsport.....	43,582	898	34,086	2,273
Joggins Mines.....	2,412	2,811	1,334	1,657
La Have.....	13,519	11,956	14,182	10,951
Liverpool.....	18,671	23,853	17,656	18,747
Lockeport.....	2,397	2,040	1,449	1,064
Louisburg.....	88,248	72,110	50,683	43,440
Lunenburg.....	43,017	40,477	63,389	48,562
North Sydney.....	196,213	220,470	213,591	211,510
Parrsboro.....	28,056	38,555	33,069	42,934
Pictou.....	4,103	8,215	6,429	11,515
Port Hastings.....	15,737	8,176	27	295
Port Hawkesbury.....	10,713	13,094	9,351	12,357
Sandy Point.....	13,317	14,529	10,099	12,182
Shelburne.....	8,604	14,238	4,812	6,459
Sydney.....	472,189	714,522	376,356	637,224
Weymouth.....	3,980	3,703	5,731	6,838
Windsor.....	157,688	191,724	199,797	223,670
Yarmouth.....	171,635	166,000	199,053	196,146
Total.....	3,767,695	4,040,207	4,515,377	4,923,809
<i>New Brunswick—</i>				
Baie Verte.....	—	—	—	—
Bathurst.....	17,548	17,548	7,170	7,160
Campbellton.....	11,772	43,240	11,185	26,064
Campo Bello.....	34,527	27,021	35,497	27,213
Chatham.....	35,137	41,848	12,492	28,150
Dalhousie.....	26,544	10,380	22,639	13,019
Dorchester.....	—	—	—	—
Grand Manan.....	—	—	—	—
Harvey.....	—	—	—	—
Hillsboro.....	27,998	47,858	17,593	35,475
Moncton.....	2,367	2,608	378	384
Newcastle.....	19,857	29,295	4,033	7,798
North Head.....	28,460	26,987	31,026	29,386
Richibucto.....	243	6,591	2,254	3,864
Shediac.....	—	—	—	—
St. Andrew's.....	32,953	32,576	38,956	39,368
St. George.....	7,513	9,022	14,919	10,789
St. John.....	1,093,300	1,012,240	1,192,042	1,028,360
St. Martin's.....	13,802	13,413	26,386	27,221
St. Stephen.....	5,972	3,242	3,939	614
Total.....	1,357,993	1,323,869	1,420,509	1,284,865
<i>Quebec—</i>				
Montreal.....	1,481,234	772,533	1,842,319	940,260
Vancouver.....	3,051,448	3,117,327	3,421,452	3,539,399
Victoria.....	4,125,310	3,729,624	4,022,142	3,862,228
Total for Canada.....	18,497,025	18,521,377	20,470,379	20,510,647

TABLE VI.—Statement showing the Total Number and Tonnage of all Vessels arrived and departed in the Maritime Provinces, by Provinces during the Fiscal Year ended March 31, 1925

Provinces	Coastwise										Total			
	Sea-going					Arrived					Arrived		Departed	
	Vessels	Arrived	Departed	Tons register	Vessels	Vessels	Arrived	Departed	Tons register	Vessels	Tons register	Vessels	Tons register	Departed
Nova Scotia.....	4,946	5,353,404	5,372	4,967,427	3,550,040	21,400	3,479,794	21,537	3,479,794	26,346	8,103,444	26,909	8,447,221	
Prince Edward Island.....	77	16,527	122	15,679	1,527	2,850	1,492	226	1,492	1,604	276,103	1,614	277,890	
New Brunswick.....	294	1,455,789	3,627	1,302,413	3,812	601,621	3,875	737	3,875	8,106	2,037,410	7,502	2,039,751	
Total Maritime Provinces.....	9,317	6,005,720	9,121	6,321,519	26,739	4,411,237	26,304	4,443,343	36,056	10,416,957	36,025	10,764,862		
Grand total for Canada.....	20,436	20,470,379	20,420	20,510,647	87,185	40,480,372	87,091	40,159,447	154,033	78,566,856	154,522	79,992,014		

Port	Index Numbers showing trend of clearances in principal Maritime Ports, 1870-1925													
	1870	1880	1890	1900	1911	1920	1921	1922	1923	1924	1925	1870	1880	1890
Charlottetown.....	-	100	57,65	132,13	125,30	5,85	25,04	59,40	87,40	72,88	70,50			
Halifax.....	100	174,10	239,34	305,68	433,78	882,25	580,49	661,70	669,90	882,27	1,218,71			
Liverpool.....	100	35,72	122,50	145,98	178,61	157,16	131,56	119,68	166,63	137,29	107,90			
Louisburg.....	-	100	100	3,19,19	2,812,80	3,178,64	2,341,03	588,61	1,711,24	1,040,70	636,43			
Lunenburg.....	100	164,39	124,95	108,86	113,33	127,60	164,00	128,40	151,42	182,20	218,59			
North Sydney.....	100	225,23	274,24	68,26	862,68	2,043,13	1,413,73	1,360,22	3,068,18	1,037,41	995,25			
Pictou.....	100	31,02	18,22	12,96	17,06	5,60	7,99	1,24	6,25	5,05	7,08			
Port Hawkesbury.....	100	28,82	35,87	122,98	86,50	12,32	26,32	19,04	16,46	21,28	20,08			
Sandy Point.....	-	100	52,22	175,54	209,13	100,00	43,46	44,73	72,18	67,26	60,33			
Sydney.....	100	137,73	129,31	125,79	291,62	438,98	961,11	1,032,88	752,32	955,07	720,64			
Windsor.....	100	104,60	324,08	921,93	556,52	849,55	534,37	687,096	573,39	337,69	428,26			
Yarmouth.....	-	100	100,00	141,97	329,88	199,52	227,88	152,91	601,13	322,21	194,22			
Campbellton.....	-	139,80	177,73	277,73	718,47	746,74	717,94	755,04	776,35	780,86				
Cape Breton.....	100	245,62	166,24	160,70	184,84	94,16	119,08	31,56	106,00	94,58	65,62			
North Head.....	-	100	104,90	135,64	207,87	264,65	205,56	265,26	259,45	252,10	214,51			
Newcastle.....	100	82,37	73,42	40,92	22,01	-	44,68	30,06	84,73	101,08	26,91			
Rideaufoot.....	100	1,32,46	1,63,1	120,87	126,76	536,23	461,71	539,31	453,23	467,33	449,91			
St. Andrews.....	100	109,94	-	-	100,00	500,76	224,21	248,79	248,95	196,83	245,70			
St. John.....	-	100	84,85	65,06	68,33	87,39	65,56	78,89	44,71	88,70	114,47			
St. Martin's.....	100	189,32	287,48	431,56	601,82	349,85	494,92	611,03	809,36	1,382,91	1,281,97			
Quebec.....	-	100	100	100,00	164,42	251,55	497,58	635,99	536,32	702,75	843,98			
Montreal.....	-	100	53,23	118,72	117,85	4,95	21,20	50,41	74,09	61,72	59,83			
Vancouver.....	-	100	111,48	172,37	248,66	321,25	557,51	425,72	396,39	412,82	484,41			
Victoria.....	-	100	121,69	138,29	137,89	204,56	197,35	182,70	155,82	203,24	202,49			
Prince Edward Island.....	-	100	100	100	176,48	215,55	497,58	635,99	536,32	702,75	843,98			
Nova Scotia.....	-	100	100	100	100,00	164,42	251,55	497,58	635,99	536,32	702,75	843,98		
New Brunswick.....	-	100	100	100	100	100,00	164,42	251,55	497,58	635,99	536,32	702,75	843,98	
Canada.....	-	100	100	100	100	100,00	164,42	251,55	497,58	635,99	536,32	702,75	843,98	

Reverting to Tables II and III, it may be pointed out that values of imports and exports should be "corrected" in terms of the fluctuations in the purchasing power of the dollar, if they are to be used as a measure of the volume of traffic. In Table VIII the leading import and export figures have been thus corrected back to 1890 in accordance with the official index number of wholesale prices, which dates from that year.

TABLE VIII.—Imports and Exports corrected as to Price Changes, 1890-1925

## IMPORTS

Year	Maritime Provinces		Total Imports		Index Number of Wholesale Prices <sup>(1)</sup>
	Original Valuations	Corrected Valuations	Original Valuations	Corrected Valuations	
1890.....	16,510,401	17,753,110	112,765,584	121,253,300	93.0
1895.....	14,050,836	17,651,800	105,252,511	132,226,700	79.6
1900.....	17,457,212	20,346,400	180,304,316	210,727,600	85.8
1905.....	21,075,924	24,004,460	261,925,554	298,320,600	87.8
1910.....	25,520,598	27,063,200	375,833,016	398,550,300	94.3
1915.....	29,924,480	27,228,821	587,439,304	534,521,650	109.0
1920.....	67,942,245	27,902,359	1,064,528,123	437,177,800	243.5
1925.....	48,701,444	30,381,437	796,932,537	497,150,670	160.3

<sup>(1)</sup> 1890-1913 unweighted.

1913-1925 weighted.

## EXPORTS

Year	Maritime Provinces		Total Exports		Index Number of Wholesale Prices <sup>(1)</sup>
	Original Valuations	Corrected Valuations	Original Valuations	Corrected Valuations	
1890.....	17,334,019	18,638,730	96,749,149	104,031,340	93.0
1895.....	19,131,684	24,034,779	113,638,803	142,762,310	79.6
1900.....	28,124,008	32,778,564	191,894,723	223,653,523	85.8
1905.....	33,874,987	38,581,990	203,316,872	231,568,191	87.8
1910.....	52,109,835	55,259,634	301,358,529	319,574,261	94.3
1915.....	84,577,195	76,958,321	490,808,877	446,595,884	109.9
1920.....	220,230,436	90,443,711	1,286,658,709	528,401,933	243.5
1925.....	122,771,431	76,588,541	1,081,361,643	674,586,177	160.3

<sup>(1)</sup> 1890-1913 unweighted.

1913-1925 weighted.

## INDEX NUMBERS]

Imports—Index Numbers 1890=100	Maritime Provinces		All Canada	
	Actual Valuation	Revised Valuation	Actual Valuation	Revised Valuation
Year				
1895.....	85.10	99.43	93.34	109.05
1900.....	105.73	114.61	160.34	173.79
1905.....	127.65	135.21	232.27	246.03
1910.....	154.57	152.44	333.29	328.69
1915.....	181.25	153.37	520.94	440.83
1920.....	411.51	157.17	944.02	360.55
1925.....	294.97	171.13	706.72	410.01

Exports—Index Numbers 1890=100	Maritime Provinces		All Canada	
	Actual Valuation	Revised Valuation	Actual Valuation	Revised Valuation
Year				
1895.....	110.37	128.95	117.46	137.23
1900.....	162.25	175.86	198.34	214.99
1905.....	195.42	207.00	210.15	222.59
1910.....	300.62	296.48	311.48	307.19
1915.....	487.93	412.89	507.30	429.29
1920.....	1,270.51	485.25	1,329.89	507.93
1925.....	708.27	410.91	1,117.70	648.45

Taking the original valuation of exports through the Maritime Provinces in 1890 as a base or equal to 100, we find that these exports increased in quinquennial periods as follows: 1895, 110.37; 1900, 162.25; 1905, 195.42; 1910, 300.62; 1915, 487.93; 1920, 1,270.51, 1925, 708.27. Correcting these figures, however, by the index number of wholesale prices we find that exports through the Maritimes for later years, expressed in percentages of 1890, were as follows: 1895, 128.95; 1900, 175.86; 1905, 207.00; 1910, 296.48; 1915, 412.89; 1920, 485.25; 1925, 410.91. Similarly in the case of all Canada the increase on the corrected basis is much less than when the original valuations have been used.

From the above it will be seen that not only on the basis of the prices current in the various years but also on the basis of the valuations as revised, exports through the Maritime Provinces up to 1920 lag but slightly behind the total increase for all Canada. In other words the growth of the Maritime export trade, as shown by these figures of valuation, was practically equal to the growth of the export trade of all Canada. This is not only true of 1915 and 1920 which were abnormal years but is also true for 1910. In 1925, however, the revised figures of valuation show the exports in the Maritimes were 410.91 per cent of the exports in 1890, while the exports from all Canada based on revised valuations were 648.45 per cent of those of 1890. This would seem to indicate that this trade through the Maritimes has seriously declined in the last five years. In the matter of imports the volume handled through Maritime ports has not grown on an equal basis with the total importations into Canada. In 1925, on the basis of the revised figures, imports into the Maritimes were 171.13 per cent of those of 1890, whereas total importations into Canada were 410 per cent of those of 1890.

##### 5. Intercolonial and Prince Edward Island Railway Records

The accompanying table (Table IX) shows the number of passengers and tons of freight carried on the Intercolonial and Prince Edward Island Railways, in comparison with all Canadian Railways, back to 1876, the first year for which statistics are available. The statistics of the Prince Edward Island and Intercolonial were included with those of the National Transcontinental and other Canadian Government railways in 1920, and with the Canadian National System from 1923 on; they consequently cannot be separately recorded beyond 1919.\*

Freight traffic, it will be noted, did not increase relatively as rapidly on the Prince Edward Island Railway as on Canadian railways as a whole, but on the Intercolonial the rate of increase was very similar from 1897 to 1915, and more rapid from 1915 to 1919. This no doubt was partly due to shipments of war materials which passed through the Maritime Provinces but did not wholly originate in them.

Since 1921, a record by provinces of the tons of freight originated by the railways and received from foreign connections is available. Table X contains the figures for the Maritime Provinces. They show approximately the same rate of decrease in 1924 from the peak of 1923 as all Canada, but they continued to decrease in 1925 when Canada as a whole recovered. The record is of originating tonnage only and is less than total tonnage by the amount of freight originated on one railway and delivered to another for furtherance.

The Intercolonial of course does not handle all the freight of Nova Scotia and New Brunswick; since the Canadian Pacific Railway entered the field the Intercolonial has possibly carried an increasingly smaller proportion of the total. The record, however, shows, as above stated, that its freight traffic in the two provinces has developed up to 1919 at least as rapidly as in Canada as a whole, while for 1921-1925 the tonnage originating in these provinces was not greatly below its usual proportion of the total for Canada.

\* The "all Canadian railways" tonnage in the table includes duplication where two or more railways handled the same freight.

TABLE IX.—Number of Passengers and tons of Freight carried by the Intercolonial and Prince Edward Island Railways

Year Ended June 30	Intercolonial Railway		Prince Edward Island Railway		All Canadian Railways	
	No. of Passengers Carried	Tons of Freight Carried	No. of Passengers Carried	Tons of Freight Carried	No. of Passengers Carried	Tons of Freight Carried
1876.....	547,930	342,196	93,968	28,358	5,544,814	6,331,757
1877.....	613,428	421,327	93,478	41,039	6,073,233	6,859,796
1878.....	618,957	522,710	111,428	38,923	6,443,924	7,883,472
1879.....	640,101	510,861	105,046	38,668	6,523,816	8,348,810
1880.....	581,483	561,924	90,533	37,208	6,462,948	9,938,858
1881.....	631,245	725,577	102,937	45,336	6,943,671	12,065,323
1882.....	779,994	838,596	118,436	48,315	9,352,335	13,575,787
1883.....	878,600	970,961	117,162	51,920	9,579,984	13,266,255
1884.....	920,870	1,001,163	118,988	51,841	9,982,358	13,712,269
1885.....	914,735	970,069	130,423	57,346	9,672,599	14,659,271
1886.....	889,864	1,008,545	120,374	57,913	9,861,024	15,670,460
1887.....	940,144	1,131,334	130,067	53,587	10,698,738	16,356,335
1888.....	996,194	1,275,995	131,246	59,603	11,416,791	17,172,759
1889.....	1,091,189	1,204,790	152,780	55,682	12,151,105	17,928,626
1890.....	1,170,249	1,353,417	133,099	51,604	12,821,262	20,787,469
1891.....	1,298,304	1,304,534	145,508	59,511	13,222,568	21,753,021
1892.....	1,297,732	1,264,575	139,389	51,064	13,533,414	22,189,923
1893.....	1,292,878	1,388,080	132,111	56,718	13,618,027	22,003,599
1894.....	1,301,062	1,342,710	123,727	53,577	14,462,498	20,721,116
1895.....	1,352,667	1,267,816	125,089	48,525	13,987,580	21,524,421
1896.....	1,471,866	1,379,618	122,586	46,395	14,810,407	24,266,825
1897.....	1,501,690	1,296,028	121,498	52,147	16,171,338	25,300,331
1898.....	1,528,444	1,434,576	126,510	57,539	18,444,049	28,785,903
1899.....	1,603,095	1,750,761	129,667	57,968	19,133,365	31,211,753
1900.....	1,791,754	2,151,208	147,471	62,247	21,500,175	35,946,183
1901.....	2,025,295	2,111,310	157,793	73,696	18,385,722	36,999,371
1902.....	2,186,226	2,385,816	184,748	75,381	20,679,974	42,376,527
1903.....	2,404,230	2,790,737	205,265	106,519	22,148,742	47,373,417
1904.....	2,663,156	2,664,149	224,567	86,286	23,640,765	48,097,519
1905.....	2,810,960	2,782,257	235,194	73,969	25,288,723	50,793,957
1906.....	2,737,160	3,156,189	256,092	87,162	27,989,782	57,966,713
1907.....	2,672,926	3,695,641	303,437	92,347	32,137,319	63,866,135
1908.....	2,866,408	4,008,541	323,935	98,590	34,044,992	63,071,167
1909.....	2,933,754	3,552,739	331,777	111,440	32,683,300	66,842,258
1910.....	3,176,154	3,984,054	352,528	103,100	35,894,575	74,482,866
1911.....	3,286,942	4,254,803	361,458	109,345	37,097,718	79,884,282
1912.....	3,473,273	4,674,692	404,564	124,242	41,124,181	89,444,331
1913.....	3,867,735	5,316,461	436,833	122,714	46,230,765	106,992,710
1914.....	3,927,559	5,082,484	443,129	116,426	46,702,280	106,393,989
1915.....	3,626,897	4,442,510	404,598	122,257	46,322,035	87,204,833
1916.....	4,305,441	6,182,949	424,467	116,856	49,027,671	109,659,088
1917.....	4,498,678	7,120,511	393,758	159,041	53,749,680	121,916,272
1918.....	4,632,016	8,177,862	376,891	193,470	44,948,638	127,543,687
1919.....	4,809,142	8,159,265	365,333	216,007	43,754,194	116,699,572
Year Ended Dec. 31						
1919.....	—	—	—	—	47,940,456	111,487,780
1920.....	—	—	—	—	51,318,422	127,429,154
1921.....	—	—	—	—	46,793,251	103,131,132
1922.....	—	—	—	—	44,383,620	108,530,518
1923.....	—	—	—	—	44,834,337	118,289,604
1924.....	—	—	—	—	42,921,809	106,429,355
1925.....	—	—	—	—	41,458,084	109,850,925

TABLE X.—Railway Freight traffic—Tons of Freight Originated and Received from Foreign Connections

Year Ended Dec. 31	Prince Edward Island	Nova Scotia	New Brunswick	Total Maritimes	CANADA
1921.....	92,411	5,565,494	2,193,474	7,851,379	83,894,436
1922.....	102,536	5,621,299	2,535,483	8,259,318	88,854,800
1923.....	95,263	6,526,241	2,774,749	9,396,253	103,757,559
1924.....	112,375	5,943,907	2,764,864	8,821,146	93,650,916
1925.....	138,231	4,221,222	2,713,063	7,072,516	96,239,379

## CHAPTER V.—WEALTH AND INCOME OF THE MARITIME PROVINCES

*Wealth.*—The total estimated capital wealth of the Atlantic Maritime Provinces of Canada in 1921, as computed by the so-called “inventory” method of adding together the values of material property of various kinds, amounted to \$1,470,206,415, or \$1,470 per capita. Of this total, \$119,912,060, or \$1,353 per capita, was allocated to Prince Edward Island; \$752,697,986, or \$1,437 per capita, to Nova Scotia; and \$597,596,369, or \$1,541 per capita, to New Brunswick. The national wealth of Canada in 1921 by this method of estimation was \$22,195,000,000, or approximately \$2,525 per capita, so that the wealth of the Maritime Provinces is 6·6 p.c. of that of the Dominion as a whole. (Figures are given in Table 1.)\*

The capital invested in farms, including implements and live stock, as determined by the last decennial census (1921) was the largest item, aggregating \$327,645,210, or 22·29 per cent of the whole. The value of agricultural production in 1921, \$114,123,000, is included as representing the average stocks of agricultural goods in the possession of farmers and traders and the amount invested in the preparation for the new crop. Thus the agricultural wealth of the three Maritime Provinces may be totalled as \$441,768,210, or 30·05 per cent of the entire estimated capital wealth of that section.

The second largest element in total estimated capital wealth was urban real property. This includes the assessed valuations of taxed and exempted property, to which was added one-third to provide for under-valuation by assessors, and for roads, bridges, sewers, and other public works. The estimated value, as based on returns for 1921 received in the Dominion Bureau of Statistics from the municipalities, was \$239,799,606, or 16·31 per cent of the total wealth of the Maritimes.

The wealth invested in steam railways, computed from the cost of road and equipment, and distributed by provinces on the basis of mileage, constituted the next largest item, amounting to \$200,947,000, or 13·67 per cent of the total.

Other important items include the capital invested in forest industries, amounting to \$158,990,000, or 10·81 per cent; household furnishings and other personal property, including automobiles, amounting to \$102,200,000, or 6·95 per cent; raw materials, stocks in process and finished products of manufacturing establishments, to which was added 100 per cent as an estimate of the value of manufactured goods in the hands of dealers, the whole amounting to \$86,627,018, or 5·89 per cent; and capital employed in mines, which totalled \$85,269,026, or 5·80 per cent.

On the basis of the 1921 population of 1,000,328, per capita wealth invested in farms and equipment was \$327; in urban real property, \$240; in railways \$201; in forests, etc., \$159; and in household furnishing, clothing and motors \$102. Further details may be examined in Table I. Historical data on a comparable basis are not available.

\* The inventory method of computing national wealth includes, as above stated, only natural wealth which has been appropriated. It does not include the values of undeveloped natural resources, nor does it make any allowance for mortgages, stocks, bonds, etc., which merely represent material property. Thus for Nova Scotia it includes the value of the machinery and other capital equipment used in coal mining, but not the coal in the mine; it includes the boats used for fishing but not the fish which the boats are used to catch; it includes the turbines and dynamos used in developing water power, but not the waterfalls themselves. In the case of forest wealth, partial exception is made by the inclusion of *accessible* raw materials. Such an estimate has a distinct value; but when the purpose is comparative as between different provinces, it tends to underestimate the wealth of any province which is especially rich in mines, fisheries or water power. The capital employed in the Nova Scotia coal mines is probably equivalent only to about three years' purchase of the coal output. It appears probable also that this method of estimating wealth hardly does justice to the Maritimes, or allows for all the property values owned by their people. Since the Maritimes are one of the oldest parts of Canada, their people have had more time to accumulate wealth, and in all probability own considerable wealth which is physically situated in other parts of the country or elsewhere.

TABLE I.—Estimated Capital Wealth of Canadian Maritime Provinces by Provinces and Chief Items, 1921

(000's omitted)

	Prince Edward Island	Nova Scotia	New Brunswick	Maritime Provinces	CANADA
Farm Values (land, buildings, implements and machinery, and live stock: census 1921).....	\$ 58,978	\$ 136,842	\$ 131,826	\$ 327,646	\$ 6,586,648
Agricultural Products in the possession of farmers and traders, 1921.....	21,431	44,234	48,458	114,123	1,396,223
Total Agricultural Wealth, 1921.....	80,409	181,076	180,284	441,769	7,982,871
Mines (capital employed, 1921).....	—	82,284	2,985	85,269	559,514
Forests (estimated value of accessible raw materials, pulpwood, and capital invested in woods operations).....	—	58,150	100,840	158,990	1,197,660
Fisheries, (capital invested in boats, gear, etc., in primary operations, 1921).....	780	8,765	3,316	12,861	25,649
Central Electric Stations (capital invested, 1921).....	435	3,987	2,523	6,945	239,976
Manufactures—machinery and tools, 1921	416	23,466	23,678	47,560	610,069
Manufactures—materials on hand, stocks in process; estimate for amount in dealers' hands, 1921.....	863	32,924	52,840	86,627	1,362,536
Steam railways (investment in road and equipment).....	15,197	79,320	106,430	200,947	2,159,298
Electric Railways (investment in road and equipment).....	—	10,628	2,899	13,527	186,519
Canals (amount expended on construction to March 31, 1922).....	—	648	—	648	141,425
Telephones (cost of property and equipment).....	599	6,371	2,914	9,884	158,678
Urban Real Property (assessed valuations and exempted property, and estimated for under valuation by assessors, and for roads, sewers, etc.).....	8,931	177,891	52,978	239,800	5,751,505
Shipping estimated from 1918 census and distributed according to tonnage owned	781	12,538	3,305	16,624	100,000
Imported Merchandise in store being one half imports during year 1921.....	501	9,450	13,604	23,555	373,902
Household furnishings, clothing, carriages, motors, etc.....	9,000	53,100	40,100	102,200	1,144,000
Specie held by Government Chartered Banks and estimated for public holdings (a).....	2,000	12,100	8,900	23,000	202,000
Total estimated wealth, 1921.....	119,912	752,698	597,596	1,470,206	22,195,302
Percentage.....	0.5	3.4	2.7	6.6	100
Percentage distribution of Canadian Population by provinces and territories, 1921.....	1.01	5.96	4.41	11.38	100

(a) The specie holdings are here distributed among the several provinces according to population.

*Income.*—We have no direct statistics of total income in Canada, and perhaps the best measure on the subject is that of general production. As shown elsewhere (Chapter III), the net value of production in the Maritime Provinces in 1924 was \$192,501,000. These values were created by approximately two-thirds of the gainfully employed persons, i.e., those engaged in the various kinds of "production proper" such as agriculture, forestry, fisheries, trapping, mining and manufacturing. But the remaining one-third of the gainfully employed are also "producers" in the larger sense of the word, being engaged in activities such as transportation, trade, administration, the professions, domestic and personal service. We may thus add one-half to the total value of production as shown above, as a rough estimate of the value in dollars of the total productive activity of the Maritime people, according to the economist's definition

of production,—which approximates to the concept of national income.\* According to this broader interpretation, Maritime production in 1924 represented created values of approximately \$288,760,000.

In order to arrive at the figure of national income, however, certain considerable deductions from the above amount must be made—deductions especially connected with the maintenance of the industrial equipment of the country, providing not only for depreciation but for obsolescence or replacement by new and improved apparatus. After these deductions have been made the 1923 income of the Maritime people is estimated at somewhere in the neighbourhood of \$270,000,000 in 1924, or \$265 per capita. The similar figure for all Canada is approximately \$4,200,000,000, or \$455 per capita.†

*Income Tax Statistics.*—A table is appended (Table II) showing income reported to the Income tax authorities for each of the Maritime Provinces, 1924 and 1925. Such data are often used in comparing the prosperity of different localities, and when used with care they have a value for this purpose. It is necessary, however, to observe the following cautions among others:—

- (1) The income reported to the income tax authorities is mainly taxable income, *i.e.* income of persons or corporations which exceeds the limit of exemption. This limit has frequently been changed, with the result that the income passing under survey changes also. Persons whose incomes are too small to be taxable are not ordinarily required to make returns. Under the present law, a community containing a few rich men and many poor ones would appear more prosperous by this criterion than one containing a large population of families with moderate incomes.
- (2) Much of the income received in kind is not reported to the income tax authorities, *e.g.* home-grown produce consumed on the farm. Similarly the person who owns a house and rents it to another must report the net rent as a part of his income; but the person who owns a house and occupies it himself is not required to pay income tax on its rental value.
- (3) There is doubtless considerable understatement of income.
- (4) Corporate incomes are usually reported at their head offices although they may be earned and distributed elsewhere. This consideration doubtless reduces the income of the Maritime Provinces as shown in tax returns.
- (5) A country may collect income taxes on income arising within its borders which is subsequently paid to foreign capitalists or workers. Thus the difference between the income of Ontario per capita and that of Nova Scotia may be partly due to investments of foreign (extra-provincial) capital in Ontario, and may be partly counterbalanced by interest payments due from Ontario enterprises to the owners of capital.

TABLE II.—Income Assessed for Income Tax.

1923-24	Estimated Population	Total Assessment, 1923-24	Per Capita 1923-24
Prince Edward Island.....	88,020	\$ 2,301,305	\$ 26.15
Nova Scotia.....	530,000	33,785,631	53.75
New Brunswick.....	395,500	22,809,357	57.67
Quebec.....	2,439,000	296,331,345	121.49
Ontario.....	3,019,000	473,015,674	156.68
Manitoba.....	637,400	92,286,842	144.79
Saskatchewan.....	797,000	50,778,824	63.71
Alberta.....	621,000	53,310,467	85.84
British Columbia.....	544,000	81,525,976	149.86

\*This method, however, probably adds too much to the value of rural production and too little to the value of urban production, seeing that transportation, banking and finance, retail and wholesale merchandising, and professional and domestic services are particularly characteristic of the larger cities.

†As in the case of capital wealth, this estimate of income, being based upon production, probably underestimates the income of the Maritime Provinces, since their people, as an old-established and "creditor" type, doubtless receive considerable income arising out of investments in the newer parts of the country and elsewhere.

TABLE II.—Income Assessed for Income Tax, 1923-24 and 1924-25—*Concluded*

1924-25	Estimated Population	Total Assessment, 1924-25	Per Capita 1924-25
Prince Edward Island.....	87,700	\$ 1,590,134	18.13
Nova Scotia.....	533,600	22,613,331	42.38
New Brunswick.....	399,400	19,500,707	48.82
Quebec.....	2,480,000	288,731,449	116.42
Ontario.....	3,062,000	436,971,432	142.71
Manitoba.....	647,000	73,497,283	113.60
Saskatchewan.....	815,000	40,415,300	49.59
Alberta.....	637,000	41,874,721	65.74
British Columbia.....	553,000	72,390,078	130.90

### Indexes of Prosperity

As akin to the subject of wealth and income certain other data may be employed for comparing the general level of prosperity in the Maritime Provinces with that of the other provinces.

*Use of Motor Vehicles.*—Motor vehicle registrations are an indirect index of prosperity.\* A comparison of the various provinces for 1924 shows that there was one registered car for the following number of persons:

Province	Number of persons per car registered.
Prince Edward Island.....	34.0
Nova Scotia.....	25.7
New Brunswick.....	20.0
Quebec.....	29.1
Ontario.....	9.9
Manitoba.....	14.6
Saskatchewan.....	11.5
Alberta.....	12.5
British Columbia.....	11.4
Yukon Territory.....	33.5

The above comparison includes commercial vehicles and dealers' cars. Passenger cars are perhaps a better index, and the following statement presents the figures relating thereto:

Province	Percentage of cars which are passenger cars	Number of persons per passenger car
Prince Edward Island.....	95.2	35.8
Nova Scotia.....	87.8	29.3
New Brunswick.....	91.7	21.8
Quebec.....	83.1	35.0
Ontario.....	88.0	11.2
Manitoba.....	92.1	15.9
Saskatchewan.....	91.5	12.6
Alberta.....	93.7	13.3
British Columbia.....	81.1	14.1
Yukon.....	68.5	49.0

These figures must of course be interpreted in the light of local considerations, such as the proportion of rural population prevented by lack of roads or other considerations from using motor cars,—also the presence of urban populations among whom commercial vehicles are much in use.

\*See the Canada Year Book 1925, p. 621, for tables showing the number of motor vehicles registered in each province from 1907 to 1924, together with a classification of the types of motor vehicles registered in 1924.

In Prince Edward Island, where the registration is low, the use of automobiles did not begin until 1913, when it was already well under way in other provinces. In a conservative community the use of automobiles may lag behind the development of the wealth of the community.

*Use of Telephones.*—The following data are taken from the Annual Report on Telephone Companies of the Dominion Bureau of Statistics.

Province	Instruments in use	Persons per telephone
Prince Edward Island.....	5,437	16.15
Nova Scotia.....	38,498	14.01
New Brunswick.....	28,128	14.20
Quebec.....	202,392	12.28
Ontario.....	473,247	6.47
Manitoba.....	67,022	9.65
Saskatchewan.....	99,035	8.23
Alberta.....	67,330	9.46
British Columbia.....	91,177	6.08

Telephones are particularly necessary for the business and professional classes, manufacturers, bankers, brokers, and generally for people who depend on speedy communication. They are therefore likely to be found in greater numbers in cities. The great use of telephones in Ontario and British Columbia is therefore not so much a sign of exceptional prosperity in these provinces as a result of urbanization. It has probably more meaning in comparisons between the prairie provinces and the Maritimes.

*Sales of Life Insurance.*—Monthly figures published by the Life Insurances Sales Research Bureau of Hartford, Conn., give the sales of new paid-for ordinary life insurance (excluding group policies) in each province as reported by 15 companies which were doing 83 per cent of all business in Canada in January, 1923. The figures for one year have been taken, to eliminate the seasonable fluctuation, increasing them by one-fifth to allow for business transacted by the smaller companies which do not report to the Hartford bureau. The totals thus obtained are still incomplete, since they fail to allow for business done by friendly societies and fraternal organizations; but they have some value for comparative purposes.

The per capita sales of life insurance in the nine provinces of Canada for the twelve months ending June, 1926, as estimated in this way were as follows:

Prince Edward Island.....	\$ 28.6
Nova Scotia.....	32.1
New Brunswick.....	31.4
Quebec.....	55.5
Ontario.....	66.8
Manitoba.....	62.8
Saskatchewan.....	47.2
Alberta.....	57.3
British Columbia.....	67.1

On the basis of this comparison it appears that the leading market for life insurance is at present found in British Columbia, followed by Ontario, the Prairie Provinces and Quebec. It would be preferable to take the figures for a number of years, as they would be less likely to be distorted by temporary business conditions such as a good crop, but the Canadian figures have only recently been begun.

A weakness of this index lies in the fact that life insurance sales depend largely on the constitution of the population. The best "prospects" for life insurance are probably young married men. But the emigration which is taking place from the Maritime Provinces is removing precisely these "prospects". For this reason, and also for the reason that urban communities are, on the whole, better fields for insurance, the sales of life insurance probably lead to an underesimate of the savings of the Maritime Provinces. A somewhat better index might be provided by the amount of life insurance in force at any given time, but this is not available by provinces.

*Building.*—Building contracts awarded may be taken as an index of prosperity. They are doubtless more accurate than building permits, which may cover work that is eventually not carried out. Building contracts per head, for the years 1923-1925, were as follows (figures for the principal cities):

—	1923	1924	1925
Maritime Provinces.....	\$ 8.58	\$ 8.43	\$ 8.70
Quebec.....	41.40	36.10	50.20
Ontario.....	51.00	44.50	39.65
Western provinces.....	17.65	15.87	16.35

Rapidly changing prices before 1923 and the large amount of extra building which was necessitated in Halifax by the explosion vitiate earlier records. The figures seem to show greater prosperity in Ontario and Quebec than in the eastern and western provinces. Here, too, there are limits to the value of the comparison. Part of the new building in Ontario and Quebec is to accommodate an increasing population; yet a stationary population might still be enjoying prosperity. Moreover, part of the new building may represent speculative over-production. Again, office buildings in the cities of Ontario and Quebec are largely occupied by enterprises which carry on business in all parts of the country and draw their profits from a wide area; the erection of a new factory or office building in Toronto or Montreal may therefore reflect a successful selling campaign in the Prairie Provinces or in the Maritimes, and may indicate prosperity in the east or west as well as in Ontario. Wherever the initial purchasing power may have been, the industrial and commercial centres will share the result in the form of building contracts.

*Other.*—An index which is used in the Dawes plan of estimating Germany's ability to pay reparations, is the consumption of various luxuries, such as tobacco, sugar, tea, coffee, alcohol, etc. None of these tests can be applied to the Maritime Provinces, as provincial statistics of consumption are not available. Various plans have been proposed to measure consumption, such as the use of sales tax collections, luxury taxes, gasoline taxes, taxes on theatre tickets, etc. but for obvious reasons they are not applicable under the methods of collection followed in Canada. Bank clearings are also inapplicable because of lack of similarity in the local conditions they reflect, *e.g.* presence of stock or grain exchanges.

## CHAPTER VI.—PRICES AND COST OF LIVING IN THE MARITIME PROVINCES—PRODUCERS' COSTS.

In the present chapter a review is given of recent trends in the Cost of Living in the Maritime Provinces, compared with similar conditions elsewhere in Canada and also in contiguous regions of the United States. Added to this are the results of a special investigation conducted by the Bureau of Statistics into living costs and also costs of production on fruit farms in the Maritime Provinces, compared with similar costs in apple-growing districts of New York State, apple-growing being selected as a fairly typical industry.

### General Trends since 1913

The general trend of the cost of living in the Maritimes as compared with other provinces since 1913 is shown in the accompanying table of index numbers (Table I), which includes foods, fuel, lighting and rentals. A typical family budget in terms of average prices for the whole Dominion in the year 1913 was first worked out, the numbers being percentages of that total. It

TABLE I.—Index Numbers of a Family Budget of Staple Foods, Fuel and Lighting, and Rent, by Provinces in Canada

Dominion Average 1913=100

#### STAPLE FOODS

	Province	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
1	Nova Scotia.	99.3	101.9	106.7	118.7	155.3	178.8	193.7	221.0	169.3	143.6	148.8	144.1	149.5
2	Prince Edward Island.	86.4	91.2	90.2	103.2	133.4	156.4	166.6	193.4	152.2	129.5	130.0	128.9	134.8
3	New Brunswick.	96.0	101.4	104.7	118.6	152.9	175.8	185.3	214.1	167.1	142.5	146.6	144.7	147.7
4	Quebec.	93.6	97.6	100.7	115.5	151.9	172.3	179.9	206.7	158.0	135.2	137.0	132.2	139.3
5	Ontario.	98.2	101.9	104.6	120.5	158.1	177.8	188.6	225.2	170.4	140.4	142.7	139.5	145.0
6	Manitoba.	107.3	111.1	110.0	118.3	146.8	171.0	188.3	220.2	182.6	137.3	136.4	133.1	141.7
7	Saskatchewan.	112.4	113.5	113.1	120.8	151.4	177.0	192.7	215.6	164.7	138.6	141.1	137.7	148.2
8	Alberta.	113.5	112.7	111.9	119.8	157.4	180.0	191.3	218.0	163.6	137.4	138.2	139.4	149.9
9	British Columbia.	124.4	123.1	118.6	127.9	161.2	186.5	202.4	232.0	180.2	157.6	155.5	154.1	164.6

#### FUEL AND LIGHTING

1	Nova Scotia.	80.1	82.4	81.6	87.8	112.9	130.3	143.3	170.6	194.0	161.7	163.8	160.9	157.1
2	Prince Edward Island.	77.2	78.9	79.2	87.8	119.0	146.4	158.1	181.8	193.9	174.6	196.6	179.1	174.3
3	New Brunswick.	88.0	92.5	92.4	100.4	122.7	145.3	161.8	185.3	198.1	173.1	174.8	169.5	164.9
4	Quebec.	93.7	94.3	92.8	95.2	134.0	157.6	156.5	195.0	197.6	183.1	183.8	175.4	172.8
5	Ontario.	95.2	94.6	93.5	97.4	123.7	157.4	165.9	198.5	203.1	190.2	194.1	183.0	179.6
6	Manitoba.	122.6	124.0	121.0	123.8	141.7	158.4	174.1	206.3	221.4	194.5	203.9	195.3	188.5
7	Saskatchewan.	139.2	136.7	124.5	129.0	142.6	159.4	178.8	210.3	216.5	205.3	201.7	195.2	186.4
8	Alberta.	86.6	89.6	89.0	91.0	92.0	101.3	119.5	161.6	140.4	129.7	134.8	122.5	128.3
9	British Columbia.	117.8	123.5	102.3	107.5	121.9	135.8	150.4	182.6	184.5	166.0	156.1	152.4	147.1

#### RENT

1	Nova Scotia.	81.3	88.1	85.9	85.9	87.5	93.2	100.5	107.7	122.9	123.3	117.7	118.5	117.5
2	Prince Edward Island.	36.2	36.2	36.2	43.5	46.6	55.9	70.3	84.5	95.3	117.4	121.7	123.8	122.5
3	New Brunswick.	63.7	70.4	71.5	72.2	76.1	85.0	99.2	119.8	128.1	131.1	138.7	142.1	142.1
4	Quebec.	73.0	73.0	73.7	78.5	80.2	77.2	75.7	93.0	106.2	113.4	118.0	121.1	120.8
5	Ontario.	84.9	88.2	79.8	79.2	90.1	98.4	110.7	154.8	147.2	152.6	151.7	154.4	152.8
6	Manitoba.	152.7	137.8	102.3	100.9	109.7	117.6	121.1	159.6	181.2	181.2	184.2	184.2	184.2
7	Saskatchewan.	198.2	159.1	114.3	106.5	110.8	128.2	157.8	178.1	180.8	182.5	184.5	187.6	184.2
8	Alberta.	155.8	145.5	114.9	106.8	111.3	120.6	134.6	154.7	158.5	161.2	157.7	150.8	148.0
9	British Columbia.	106.1	106.4	85.2	81.8	83.3	100.8	108.0	119.3	132.0	132.1	132.1	134.3	135.4

#### GRAND TOTAL

1	Nova Scotia.	90.6	94.5	96.2	103.3	126.3	142.9	154.9	175.3	154.7	139.1	140.1	137.4	139.4
2	Prince Edward Island.	68.0	70.8	70.3	80.7	101.7	120.6	132.5	154.5	138.3	131.5	136.2	133.7	135.6
3	New Brunswick.	83.8	89.0	91.7	100.2	122.5	140.5	152.6	177.8	157.9	143.0	147.7	146.9	147.9
4	Quebec.	86.5	88.7	90.3	100.0	124.9	137.7	140.9	166.0	145.6	134.3	136.7	134.1	137.4
5	Ontario.	93.2	96.2	94.6	103.2	130.0	147.7	158.7	187.1	163.5	151.4	152.5	150.2	152.2
6	Manitoba.	124.9	122.0	108.9	113.0	133.2	151.0	163.3	197.4	176.8	160.1	160.7	158.6	162.2
7	Saskatchewan.	145.5	132.3	115.1	117.1	136.3	157.8	178.9	202.1	177.2	162.8	163.9	162.1	165.3
8	Alberta.	124.7	120.8	109.8	111.5	132.8	149.0	162.1	188.6	158.7	144.5	144.1	140.6	148.0
9	British Columbia.	117.2	117.4	104.9	109.3	129.1	150.2	162.9	186.6	164.1	150.0	147.2	146.9	152.0

will be noted that tendencies have not differed materially in the Maritime Provinces from elsewhere, variations in the figures being explanable on special or local rather than on general grounds.

### Comparative Living Costs, 1925

The actual costs of the family budgets which are the bases of the above index numbers for 1925 are given in Table II, and will be useful for comparisons of outlays in that year throughout Canada.\*

TABLE II.—Average Weekly Cost of Family Budget of Foods, Fuel and Lighting and Rent by Provinces in Canada, 1925

Province	Foods	Fuel and Lighting	Rent	Total
Nova Scotia.....	\$ 10.97	\$ 3.00	\$ 5.58	\$ 19.55
Prince Edward Island.....	9.89	3.33	5.82	19.02
New Brunswick.....	10.84	3.15	6.75	20.74
Quebec.....	10.22	3.30	5.74	19.27
Ontario.....	10.64	3.43	7.26	21.34
Manitoba.....	10.40	3.60	8.75	22.75
Saskatchewan.....	10.87	3.56	8.75	23.18
Alberta.....	11.00	2.45	7.03	20.48
British Columbia.....	12.08	2.81	6.43	21.32

### Comparative Food Prices, 1926

We may next directly compare the current prices of certain staple food products in typical cities of the Maritime Provinces and nearby cities in Canada and the United States (Tables III and IV). It will be seen that Maritime prices are not materially different from those of Montreal and Toronto, though higher in some cases, but are considerably lower than those of the larger neighbouring cities of the United States—a statement which applies to most Canadian cities.

TABLE III.—Cost of a Food Budget, comprising specified articles and quantities mentioned, in certain cities of the United States, January, 1926

Commodities	Quantity	Boston	Fall River, Mass.	Portland, Me.	Buffalo, N.Y.	United States average
Sirlon steak.....	1 lb.	65.1	60.9	60.9	40.5	40.8
Round steak.....	1 "	52.4	46.1	45.9	35.0	35.0
Rib roast.....	2 "	79.6	63.2	59.2	59.2	60.0
Chuck roast.....	2 "	56.0	45.8	41.6	45.8	44.2
Bacon, sliced.....	1 "	47.4	45.4	45.2	45.1	48.2
Salmon.....	½ "	9.2	9.5	9.8	9.6	9.3
Milk, fresh.....	6 qts.	89.4	84.0	81.0	79.2	89.2
Butter.....	3 lbs.	172.8	167.1	175.2	169.2	165.2
Cheese.....	2 "	79.6	78.2	77.4	76.0	75.2
Lard.....	2 "	44.8	43.4	42.2	42.2	44.6
Eggs, fresh.....	1 doz.	65.8	70.9	59.3	57.2	53.9
Bread.....	15 lbs.	136.5	139.5	150.0	135.0	141.0
Flour.....	10 "	69.0	64.0	63.0	58.0	62.0
Rolled oats.....	5 "	45.5	48.5	37.5	43.5	45.5
Rice.....	2 "	25.2	24.4	25.8	23.0	23.2
Potatoes.....	2 pkgs.	183.0	189.0	171.0	171.0	174.0
Onions.....	1 lb.	6.4	6.1	5.5	6.8	5.9
Corn, canned.....	½ "	6.6	5.7	5.6	5.3	5.6
Peas, canned.....	½ "	4.2	3.7	3.7	3.3	3.6
Sugar, granulated.....	4 "	26.4	26.8	26.8	25.6	26.8
Tea.....	½ "	38.7	31.4	30.4	34.6	38.0
Coffee.....	½ "	14.0	13.3	13.5	12.5	12.8
Prunes.....	1 "	17.6	15.6	15.8	16.7	17.2
Totals.....		\$13.35	\$12.82	\$12.46	11.94	12.21
		Anthracite	Anthracite	Anthracite	Anthracite	Anthracite
Coal (prices April, 1926).....		\$15.75-16.00	\$16.25-16.75	\$16.56	\$13.44-13.78	\$15.37-15.54
						Bituminous \$ 9.11

\*See Prices and Price Indexes, 1925, Dominion Bureau of Statistics, pp. 90-91, for more detailed statistics.

TABLE IV.—Cost of a Food Budget, comprising articles and quantities mentioned, in Maritime Cities, Montreal and Toronto, January 1926

**Special Investigation into Costs of Living and Prices Paid for Materials in the Fruit Growing Areas in the Annapolis Valley, Nova Scotia, and in New York State**

The information which follows was obtained by visiting supply points for fruit growers in the Annapolis Valley, (Annapolis, Kings and Hants counties) and in New York State, (Niagara, Monroe and Columbia counties). Niagara and Monroe counties are situated just south of Lake Ontario in a district where the intensive cultivation of orchards probably surpasses that of any other district in the United States. Columbia county is in the Hudson River Valley and ranks with the former district as a fruit-growing centre. New York is the largest apple growing state in the Union.

The method adopted in collecting the prices data was to compare identical grades in both countries as far as that was practicable. It was, however, frequently impossible to make such exact comparisons owing to differences in styles and makes and in customs and standards of living. This was particularly true of commodities falling within the clothing and house-furnishings categories. The diversity of makes and styles and, to a lesser degree, the differences in standards of living, rendered it necessary to make the comparison on some other basis than that of identical qualities in goods. The method adopted was to ascertain the predominant selling price, that is, the price at which sales were most frequently made, of the article in question. Where this method was used, differences in price levels in the two countries may be partly due to difference in quality as well as to the price factor; this, however, has not operated to destroy comparability.

To ascertain cost of living conditions four groups of commodities were studied, viz., Food, Clothing, Furniture and Household Effects, Fuel and Lighting. The results show that in all four groups costs of living were higher in New York State than in the Annapolis Valley. A budget was constructed for each group, which included the commodities shown in the price lists. In calculating the budget each commodity was weighted by the approximate yearly consumption and results reduced to per capita or per family weekly expenditure. Table V gives the budget figures.

**TABLE V.—Comparative Per Capita or Per Family Weekly Costs of Specified Groups of Commodities in the Annapolis Valley and New York State**

	New York State	Annapolis Valley
Weekly budget of foods for a family of five.....	\$ 11.90	\$ 11.15
Per capita weekly expenditure for clothing—		
Men.....	1.80	1.68
Women.....	1.53	1.41
Family expenditure, weekly, for furniture and household effects.....	1.37	1.30
Family expenditure, weekly, for fuel and lighting.....	2.90	2.60

A detailed explanation of the situation follows:

*Food Prices.*—In the food group it was found that prices of animal products (meats, butter, etc.) were, on the whole, considerably higher in the New York sections, while the prices of many staple groceries were somewhat lower (see Table VI for statement of comparative prices in full detail). The latter fact is accounted for partly by the intense competition of chain stores.

Prices for meats and groceries weighted, according to family consumption, give the following amounts as the cost of a family budget for one week:—

Annapolis Valley.....	\$11.15
New York State.....	11.90

TABLE VI.—Comparative Table of Food Prices at Points in New York State and Annapolis Valley

NOTE.—Some of the commodities included in the following tables are produced and consumed directly on the farm. The price quoted is the prevailing price at supply points nearest to the farming community concerned.

—		New York State	Annapolis Valley
<b>Meats, etc.—</b>			
Beef, sirloin...	lb.	40	30
Beef, round...	"	35	25
Beef, rib roast...	"	34	22
Beef, shoulder...	"	26	16
Beef, stewing...	"	22	14
Pork, fresh...	"	35	25
Pork, salt...	"	32	27
Bacon, not sliced...	"	44	42
Bacon, sliced...	"	48	47
Ham, boiled, sliced...	"	70	65
Fish, cod, salt, boneless...	"	30	18
Fish, salmon, canned kind most sold...	"	36	25
Lard...	"	22	25
Eggs, fresh...	doz.	44	40
Butter, creamery...	lb.	54	45
Butter, dairy...	"	48	40
Cheese...	"	32	33
Milk...	quart	11	12
<b>Groceries—</b>			
Bread...	lb.	8 $\frac{2}{3}$	8 $\frac{2}{3}$
Soda biscuits...	"	15 $\frac{1}{2}$	17 $\frac{1}{2}$
Flour...	24 lbs	1.40-1.45	1.45
Rolled oats...	lb.	5	6
Rice...	"	12	9
Tapioca...	"	14	15
Beans...	"	8	9
Onions...	"	4 $\frac{1}{2}$	7
Potatoes...	peck	55	55
Prunes, medium...	lb.	16	17 $\frac{1}{2}$
Raisins...	"	14 $\frac{1}{2}$	19
Currants...	"	16 $\frac{1}{2}$	19
Tomatoes, canned 2 $\frac{1}{2}$ 's...	tin	23	18
Peas, canned...	2's tin	18	17
Corn, canned...	"	17	17
Peaches, canned...	"	25	35
Sugar, granulated...	lb.	6 $\frac{1}{2}$	8
Sugar, yellow...	"	6	7 $\frac{1}{2}$
Tea, kind most sold...	"	70	70
Coffee "	"	50	65
Vinegar...	gal.	36	43
Salt...	lb.	3	3 $\frac{1}{2}$
Pepper...	"	60	60
Soap...	bar	6	7
Coal oil...	Imp. gal.	24	35
Matches...	box 400	5 $\frac{1}{2}$	13 $\frac{1}{2}$

*Clothing Prices.*—In this group and in that of house furnishings, prices of woollen goods were found to be higher in New York State and those for cotton goods lower (Table VII). Since the disparity is greater for woollen goods all textile articles average higher in New York State.

A budget consisting of the clothing items included in the accompanying table of prices and weighted according to yearly consumption, gives the following weekly per capita amounts:

## WEEKLY EXPENDITURE PER CAPITA FOR CLOTHING

—		New York State	Annapolis Valley
		\$ cts.	\$ cts.
Men...		1 80	1 68
Women...		1 53	1 41

TABLE VII.—Comparative Prices of Clothing

		New York State	Annapolis Valley
		\$ cts.	\$ cts.
(a) MENS CLOTHING—			
Overcoat, heavy.		35 00	30 00
Suits, tweed.		30 00	25 00
Suits, serge.		35 00	30 00
Overalls.		1 75	2 25
Socks, cotton.		0 25	0 25
Socks, woollen.		0 75	0 65
Underwear, wool, heavy.		5 00-7 00	5 00
" cotton		1 75	2 00
Shirts, work.		1 00	1 50
" negligee.		1 75-2 00	2 00
Collars, soft.		0 20	0 30
Hats, felt.		3 00-5 00	4 00-5 00
Caps.		1 50	2 00
Sweaters, light.		3 00-5 00	3 00
Sweaters, heavy.		8 00	6 00
Boots, work.			
" light.		3 75	4 00
" heavy.		5 00	4 75
Boots, dress.		5 00	5 25
(b) WOMEN'S CLOTHING—			
Topcoat, heavy.		40 00	30 00
Wool dress.		15 00	12 00
Cotton dress.		4 75	5 00
House "		1 75	2 25
Hosiery, silk.		1 00-1 50	1 00-1 50
" wool.		1 50	1 25
" cotton.		0 50	0 50
Nightgown, cotton.		1 00	1 25
Cotton vest.		0 45	0 45
Princess slip.		1 25	1 50
Hats, winter.		5 00	5 00
" summer.		5 00	5 00
Shoes, working.		5 00	4 25
" dress.		5 00	5 00

*Furniture and House Furnishings.*—In this group it was extremely difficult to make satisfactory comparisons on account of the great variety of makes and qualities. Only in the simpler kinds of furniture was there found to be anything approaching standardization. Moreover it was found that in New York State there was a tendency to use more expensive types of furniture than are used in the Annapolis Valley. Excellent roads, tourist traffic, etc., seem to bring about greater uniformity in regard to living standards in town and country. Where prices for goods of similar quality could be obtained it was found that they were not much different in the two countries (see Tables VIII, IX and X).

A budget consisting of the articles included in the price lists for furniture, textile household effects and miscellaneous household effects, weighted according to yearly consumption, shows the following amounts:

WEEKLY EXPENDITURES PER FAMILY FOR FURNITURE AND HOUSE FURNISHINGS

New York State.....	\$ 1.37
Annapolis Valley.....	1.30

TABLE VIII.—Comparative Furniture Prices

	New York State	Annapolis Valley
	\$ cts.	\$ cts.
Metal bed.....	10 00	10 00
Ordinary spring.....	10 00	9 00
Ordinary mattress.....	12 00	10 00
Dresser, hardwood, walnut finish.....	34 00	30 00
Wicker rocker, cretonne finish.....	15 00	15 00
Wooden rocker.....	10 00*	4 50
Kitchen table, wood top.....	4 75	5 50
Kitchen table, porcelain top.....	10 50	10 50
Kitchen chairs.....	2 25*	1 25
Chesterfields sets, 3 piece.....	175 00	175 00
Coal and wood range.....	100 00-125 00	100 00

\* Better quality.

TABLE IX.—Comparative Prices of Textile House Furnishings

	New York State	Annapolis Valley
	\$ cts.	\$ cts.
Pillow cases, cotton.....	pair 0 90	0 75
Sheets, cotton.....	each 1 75	2 00
Tablecloths, linen.....	“ 6 00	5 00
Towels, hand, cotton.....	“ 0 25	0 25
“ linen.....	“ 0 50	0 45
Towels, bath, cotton.....	“ 0 50	0 50
Blankets, cotton.....	pair 2 50	2 25
Blankets, wool, heavy.....	“ 12 50	10 00
Comforters, cotton.....	each 6 00	4 50
Oil cloth, table.....	yard 0 45	0 50
Curtains, scrim.....	“ 0 35	0 25
“ net.....	“ 0 50	0 50
Carpet rugs, Axminster.....	each 42 00	45 00
“ tapestry.....	“ 25 00	22 00
Congoleum rugs.....	“ 15 75	15 75
Oilcloth, 2 yds. wide.....	per yd. 1 00	1 10

TABLE X.—Comparative Prices of Miscellaneous Household Effects

	New York State	Annapolis Valley
	\$ cts.	\$ cts.
Saucepans alum., 3 quart.....	1 00	1 00
Saucepans, enamel, 3 quart.....	0 40	0 60
Frying pan, large.....	0 55	0 60
Tin pie plates.....	0 10	0 12
Granite pie plates.....	0 25	0 25
Boiler ix, No. 8.....	2 00	1 75
Scrubbing brush.....	0 25	0 30
Washtubs, galvanized medium.....	1 00	1 75
Broom.....	0 75	0 80
Teapot, enamel.....	0 80	1 10
Garden rake.....	1 00	1 25
Coal shovel.....	1 00	2 00
Electric light bulbs 40W.....	0 27	0 35
Electric toasters.....	4 00	5 00

*Fuel and Lighting.*—A budget for fuel and lighting, including coal, wood and coal oil, allowing for the difference in heating units in Anthracite coal but not allowing for the greater fuel value of hardwood, weighted according to estimated consumption, shows the following results:

—	New York State	Annapolis Valley
Weekly household average expenditure.....	\$ 2 90	\$ 2 60

Electricity was not included in the budget calculation, as the rates vary considerably in different localities and more information would have had to be collected before a reliable comparison could be made. Moreover, in the Annapolis Valley coal-oil lighting is still predominantly used (see Table XI).

TABLE XI.—Comparative Prices for Fuel and Lighting

—	New York State	Annapolis Valley
Coal, per ton.....	\$ cts.	\$ cts.
Wood, per full cord equivalent.....	Anthracite, 15 00 Mostly soft 10 25 0 24 0 21½	Bituminous, 10 00—11 00 Hard, 7 50—9 50 0 35 0 32
Coal Oil, retail per gal. (Imperial). . . . . quantities per gal. “ . . . . .		
Electricity.....	Lockport, Niagara County, 5c. per K.W. hr., for first 35 K.W., 2c. thereafter. Medina, Monroe County, 12c. per K.W. hr. for small consump- tion, 2c. afterwards. Kinderhook, Columbia County, sliding scale commencing at 20c. average 11c.	Near Kentville— Light 12½c. K.W. hr. Heat, first 100 K.W. 4c., second 100, 3½c., third 100, 3c., over, 2½c.

*Producers' Materials and Costs.*—The accompanying table gives comparative data regarding the price of materials which the farmer must purchase to carry on production: (Table XII)

TABLE XII.—Comparative Prices of Producers Materials

—	New York State	Annapolis Valley
<b>FARM IMPLEMENTS, ETC.—</b>	\$ cts.	\$ cts.
Walking Plough.....	26 00	22 00
Power Sprayers.....	425 00	Myers & Hardy average price 455 00
Horse Disc Harrow, 2 horse, 12 disc, 16 ins.....	47 75 to 52 00	53 00
Mowing Machine, 5 ft. cut.....	D. & M. 80.00—90.00	D. & M. 98 50
Horse Rake, 8 ft.....	D. & M. 45 00	D. & M. 53 50
Potato Diggers.....	Eureka 130 00	Junior 138 00
Potato Planter.....	140 00	145 00
Wagon.....	Keystone, \$70.00, other makes 85 00—116 00	D. & M. 118 00
Manure Spreader, 2 horse.....	D. & M. 175 00—180 00	D. & M. 192 00
Lime Sower, 8 ft.....	80 00—90 00	100 00
Grain and Fertilizer Drill.....	165 00—180 00	175 00
Lever Spring Tooth Harrow.....	2 sections 31 00	2 sections 32 00
Tractor, Fordson standard equipment.....	520 00—525 00	635 00
Trucks, Ford 1 ton—		
chassis.....	352 00—359 00	475 00
chassis and starter.....	402 00—409 00	545 00

TABLE XII.—Comparative Prices of Producers Materials—Continued

	New York State	Annapolis Valley
		\$ cts.
<b>TOOLS AND OTHER HARDWARE—</b>		
Nail Hammer, each.....	0 75	1 00
Wire Nails base keg.....	3 90	4 50
Axes, single.....	2 00	1 85
Axes, double.....	2 75	2 50
Barbed Wire, 80 rod reel.....	4 50	4 60
6 in. Diamond File.....	0 20	0 25
Corrugated Steel 8 in. T hinge.....	0 40	0 70
Stable Lantern.....	1 35	1 40
Pitch Fork.....	1 25	1 35
Manure Fork.....	1 75	1 75
Scythe.....	1 75	2 15
Hoe.....	1 00	1 25
Long handled shovel.....	1 15	1 35
<b>FERTILIZING MATERIALS—</b>		
Sulphate of Ammonia.....	65 00—78 00	70 00
Nitrate of Soda—Carloads.....	62 00—64 00	
Retail.....	65 00—75 00	65 00
Acid Phosphate.....	21 00—24 00	23 00
Muriate of Potash.....	46 00	42 00
4—8—4.....	36 80—42 80	35 00
3—8—3.....	35 00—38 00	32 00
Manure (Very little obtainable.).....	2 00 up	2 00 or less

SPRAYING MATERIALS	New York State		Annapolis Valley
	Hudson Valley	Lake Ontario Section	
90-10 sulphur dust.....	\$ cts. 4 50	\$ cts. —	\$ cts. 6 00
Pure sulphur dust.....	" 3 00	3 10	3 90
Super sulphur dust.....	" —	3 50	3 50
Lime sulphur.....	gal. 15c.—17c.	16c.—17c.	\$11 for 40 gals.
Bluestone (copper sulphate).....	lb. 7c.—8c.	6c.—9c.	8c.
Arsenate of lime (calcium arsenate).....	" 15c.	15½c.	14c.
Arsenate of lead, dry.....	" 16c.	16c.—20c.	24c.
Arsenate of lead, paste.....	" —	8c.—11c.	10c.
Hydrated lime.....	ton 22 00	20 00	22 00
Black leaf 40 (nicotine sulphate).....	gal. 12 50	11 00—13 00	12 50

N.B.—Prices are shown for three sections because of differences in marketing methods. In the Hudson and Annapolis Valleys many materials are purchased and sold co-operatively with the result that prices in several lines are lower.

OTHER FARM MATERIALS	New York State	Annapolis Valley
		\$ cts.
Middlings.....	cwt. 1 80—2 00	2 35—2 45
Bran.....	1 80	1 90—2 10
Corn meal.....	2 10	2 25—2 50
Motor cars—Ford prices, Standard Equipment—		
Runabout.....	400 00	545 00
Coupe.....	535 00	710 00
Tudor.....	545 00	725 00
Fordor.....	595 00	800 00
Touring.....	420 00	565 00
Coal oil—large quantities—Imperial gal.....	21½c.	32c.
Gasoline—large quantities—Imperial gal.....	24 c.	*35c.
Barrels.....	60 c.	40c.
Tires—Firestone, 30" x 3½".....	10 00	11 50

\*When used for tractor a rebate of 4c. tax is collectable.

## Miscellaneous Producers' Costs—Concluded.

MISCELLANEOUS PRODUCERS' COSTS	New York State		Annapolis Valley
	Lake Ontario Section	Hudson Valley	
<i>Wages—</i>			
Hired man per month with privileges such as house, garden, etc. Find own meals.....	80 00	65 00—75 00	50 00—65 00
Day labour. Find own meals..... per day	4 00 10 hrs.	3 50 9 hrs.	2 50
<i>Telephone rates—</i>			
Per month.....	2 00	3 00	2 00
<i>Mutual Fire Insurance rates—</i>			
Per \$1,000 for 3 years.....	2 00	1 50	1 50 maximum 5,000
<i>Taxes—</i>			
One example taken from each section.			
Per \$1,000.....	25 50	39 00	27 00
Per cent of property value assessed.....	40	33 $\frac{1}{2}$	20

FARM LAND VALUES PER ACRE	New York State	Annapolis Valley
	\$ cts.	\$ cts.
Exceptional orchard land, per acre.....	400 00—600 00	500 00
Ordinary orchard land.....	200 00—400 00	300 00
Ordinary tillage land.....	75 00—100 00	75 00
Rough pasture land.....	25 00	25 00
<i>Building values—</i>		
Range.....	4,000—20,000	3,000—6,000
Average value.....	7,500	—
Mortgage rates.....	around 6%	around 7%

It is difficult to reduce the preceding items of producers' costs to definite summing up. Nevertheless from data collected in the Annapolis Valley some idea may be gained regarding the relative position of farmers in that region with respect to production costs and those in the areas of New York State. The following costs per acre for the Annapolis Valley were estimated on the basis of an assumed production of 80 barrels to the acre:

Labour for maintenance, fertilizing, cultivating, pruning, etc.....	\$ cts.
Labour of handling, picking, packing, etc.....	40 00
Barrels at 40c.....	40 00
Materials—fertilizing, spraying, etc.....	32 00
Fixed charges.....	24 00
	32 00

168 00

Of this total cost per acre, \$112 or 66 $\frac{2}{3}$ % was incurred for labor and for barrels, two items in respect to which the Annapolis Valley farmers have a decided advantage. Of the materials used, \$20.50 out of \$24.00 was expended for fertilizers and spraying materials in which the Annapolis Valley farmer apparently does not labor under a material disadvantage when both fertilizers and spraying materials are considered together. In the items included under fixed charges, there is no disadvantage in tax rates or insurance charges. There would be an advantage in interest charges based on capital values. Mortgage and equipment charges would be higher for the Annapolis Valley farmer. Feed costs are likewise higher (bran, middlings, etc.).

The above calculations were made on the basis of a yield of 80 barrels to the acre. If this be considered too high, and the yield halved, the results are as follows, in this case over 57% of the total cost being for labor and barrels:

Labour for Maintenance.....	\$40.00
" in handling.....	20.00
Barrels.....	16.00
Materials.....	24.00
Fixed charges.....	32.00

\$132.00

From the point of view of actual production costs the Annapolis Valley farmer does not seem, all things considered, to be at a disadvantage as compared with New York State fruit growers. A lack of prosperity must then be due to farming methods or marketing conditions. With regard to efficiency in farming methods, the opinion of well-informed people in the Annapolis Valley was that intensive and extensive cultivation should be greatly increased. This would lead to more diversified crops, larger areas cultivated and greater production per acre, resulting in a lower overhead charge per unit of produce. The farms visited in New York State offered considerable contrast to many in the Annapolis Valley in the greater diversity of their products and the larger area of individual tillage crops. The Western New York section has, as already remarked, reached perhaps the highest stage of intensive cultivation attained by fruit-growing in the United States. It has been the subject of much study by the New York State Agricultural College at Ithaca. Very comprehensive statistics of farm costs, production, capital, profits, etc., have been collected from individual farmers for a number of years. These figures are averaged yearly and afford a means by which the farmer can judge of the strength or weakness of his methods as compared with those of others. Similar work of this nature would doubtless be of value in the Annapolis Valley.

Intimately related to the question of production is that of markets. Freight charges limit competition with Ontario. Alternatives include the West Indies and British markets. In respect to markets, New York State possesses many advantages. Transportation facilities between New York, Boston and the fruit-growing regions is excellent. Goods can be shipped from the Lake Ontario section one day and be in New York the next morning. Moreover, there are numerous large cities and towns which have to be supplied. In the Lake Ontario section farmers truck their garden and orchard produce to Buffalo, Niagara Falls, Rochester, etc., the roads being numerous and excellent. Even with these advantages the farmers complain of keen competition, especially in New York City and Atlantic Coast points, from Virginia and other states.



## CHAPTER VII—PUBLIC FINANCE—THE FINANCIAL RELATIONS OF THE DOMINION AND THE MARITIME PROVINCES

*Introduction.*—In the sixties of the last century the accepted theory of the functions of government was that they ought to be reduced to the minimum—that the main functions of government should be restricted to the protection of the society against the violence of other societies, and the protection of the individual within the society against the violence or the fraud of other members of the society. Or, to state it otherwise, the two main functions of the government were regarded as being the defence of the realm and the administration of justice within the realm—the cost of the latter to be largely met by fees.

The effects of the general acceptance of this *laissez faire* theory of the functions of government may be seen in the British finance of the period. For example, in the fiscal year ended 1867, out of a total gross expenditure of £66.8 millions, £26.1 millions was for interest on war debt, £25.4 millions for the army and the navy, making a total of £51.5 millions for the defence of the realm. Of the remainder, £5.6 millions was absorbed by the cost of collecting the revenue, so that £9.7 millions was all that was available to defray all other expenses, including the civil list of the sovereign, the administration of justice, etc., this sum being about \$1.50 per head of the estimated population of that year.

In the British North American provinces the same theory of government naturally obtained as in the Mother Country; in these provinces, however, there was no war debt and only a moderate total debt incurred for the construction of public works which, where not immediately productive of revenue, were, nevertheless, of great usefulness and an asset to the country. Furthermore, there was practically no current expenditure for purposes of defence, as this was provided by the Imperial forces. Thus, with the most expensive item in the budgets of the period eliminated from the expenditures of the British North American provinces, it was possible to carry on their administration at what would today be considered an exceedingly small cost, expenditures except for necessary developmental public works being restricted to the lowest limit. This was the attitude which prevailed at the time of Confederation and which pervades the negotiations for the settlement of the financial arrangements necessitated by Confederation as between the Dominion and the provincial governments. The entire expenditure chargeable to consolidated fund in the Dominion for the fiscal year ended 1869 was but \$14,000,000, out of which subsidies paid to the provinces accounted for \$2,600,000.

*Financial Negotiations at Confederation.*\*—Prior to Confederation the chief revenues of the provinces had been collected by means of customs and excise duties (indirect taxation), and these customs and excise duties were henceforth to pass to the treasury of the central Government. The remaining revenues, arising largely from the territorial possessions of the provinces, were comparatively small, amounting in 1863 to \$107,000 in Nova Scotia, \$89,000 in New Brunswick, and \$32,000 in Prince Edward Island. As these sums were inadequate to meet the cost of the maintenance of public works and educational institutions and the administration of civil law, it was necessary that the provincial treasuries should be assisted by the Dominion. While in her estimate of outlay for 1864 for local objects the Province of Nova Scotia had provided for an expenditure of \$664,000, she undertook to carry on adequate services in the future under Confederation for \$371,000—a reduction of 40 per cent. Nova Scotia thus needed \$264,000 in addition to her territorial revenues of \$107,000; this sum worked out at about 80 cents per head. New Brunswick, who could not manage her local expenditures on this basis, proposed to reduce them from an estimated \$404,000 to \$353,000, and to make a further reduction of \$63,000 within ten years, but for each of the first ten years she was to receive a special grant of \$63,000 required to balance her accounts, which brought her subsidy to practically the same

\*The financial arrangements at the time when Confederation was being negotiated for would appear to have been largely in the hands of Hon. (later Sir) A. T. Galt, whose speech to his constituents at Sherbrooke on November 23, 1864, gives in outline the settlement arrived at by those who participated in the Quebec Conference in the preceding month. This speech was printed as a pamphlet, and a copy is contained in Vol. II of the collection "Pamphlets on Confederation".

level as that of Nova Scotia. This figure of 80 cents per head was thus taken as the basis of the normal subsidies to the provinces. To this the London negotiations of February 1867 added for cost of local legislatures \$80,000 for Upper Canada, \$70,000 for Lower Canada, \$60,000 for Nova Scotia, \$50,000 for New Brunswick; it also provided that while the grants in aid of 80 cents per head should in the case of Ontario and Quebec remain stationary as based upon their 1861 population, those to Nova Scotia and New Brunswick should increase with increasing population, until the population of each province reached 400,000 (as ascertained at decennial censuses), thereafter remaining stationary: (B.N.A. Act 1867, s. 118). Thus the maximum grant in aid to each of these provinces was to be \$320,000.

From the above it becomes evident that at the time of Confederation it was not contemplated that the cost of provincial government would grow; if it did, the natural increase of the territorial revenues of the provinces would make provision. If the latter failed, then the provinces would be obliged to resort to direct taxation as per section 92 (2) of the B.N.A. Act, an alternative which was considered to carry its own safeguard against local extravagances. The subsidy was fixed, not at an increasing rate according to population, but at the rate which existed at the Census of 1861. By this means, as the population increased, the subsidy would not normally increase with it.†

From the standpoint of later experience it would appear that the above was too restricted a view of the financial relations between the Dominion and its provinces, and that in particular it erred in the assumption that the local expenditures of Nova Scotia could be reduced by 40 per cent. From this original attitude arose many of the subsequent demands for "better terms" which disturbed relations between the Dominion and provincial Governments.

*The Debt Allowances.*—The second important financial question at the time of Confederation was that of the provincial debts. Since the revenues which paid the interest upon these debts were being allocated to the Dominion Treasury, it was necessary that the latter should also be charged with the payment of the interest. However, since certain parts of the debt of Canada had been contracted for specific local purposes, it was considered that this should not be transferred to the Dominion. The debt of Canada, contracted for general purposes, was about \$62,500,000 or at the rate of \$25 per head for the 2,500,000 people of the united provinces of Upper and Lower Canada, and debt allowances on the same basis were granted to Nova Scotia and New Brunswick on the basis of \$25 per head of their populations, being \$8,000,000 for N.S. and \$7,000,000 for N.B. (See B.N.A. Act, 1867, sections 112-115). The provincial debts assumed by the Dominion at Confederation were therefore as follows:—

Canada (Province).....	\$ 62,500,000
Nova Scotia.....	8,000,000
New Brunswick.....	7,000,000
 Total.....	 \$77,500,000

Subsequently to Confederation, as the original provinces found their financial resources embarrassed by the payment of interest on the debts which still remained, and as new provinces were taken into the Confederation, readjustments were effected, increasing the total amount of provincial debts assumed by the Dominion to \$109,430,148 in 1895. The additional debts taken over by the Dominion were as follows:—

Nova Scotia.....	\$ 1,186,756
The province of Canada (1873).....	10,506,089
Province of Ontario.....	2,848,289
"    Quebec.....	2,549,214
"    Nova Scotia.....	2,343,059
"    New Brunswick.....	1,807,720
"    Manitoba.....	3,775,606
"    British Columbia.....	2,029,392
"    Prince Edward Island.....	4,884,023
 Total.....	 31,930,148
 Grand Total to 1895.....	 \$109,430,148*

† The exception to this rule, agreed to at the London negotiations of 1867, allowing Nova Scotia and New Brunswick to draw grants for increasing population up to \$320,000, was, it will have been noted, within a definitely fixed limit.

\*From the Statistical Year Book of Canada, 1895. Since 1895 only a minor amount has been assumed (See the Public Accounts), viz., \$267,026 in 1899.

*The Movement for Better Terms.*—Both on account of the increasing population and needs of the provinces, and on account of the expansion of the people's ideas as to the functions of Government (an expansion which has been largely in the sphere of education and social and humane legislation reserved by the British North America Act to the provinces) the increasing expenditure of the provincial Governments and the reluctance to impose direct taxation led shortly to agitations for "better terms" as regards subsidies.

The first objection came from Nova Scotia in the first session of the first Parliament.\* The result of their protest was that by an Act of 1869 (32-33 Vict. c. 2) the debt allowance for Nova Scotia was increased from \$8,000,000 to \$9,186,756, (it should be understood that a province draws interest at the rate of 5 p.c. on such part of the debt allowance as is not absorbed by its debts taken over by the Dominion). In addition, an annual allowance of \$82,698, over and above all other sums payable under the Act of 1867, was granted to Nova Scotia for a period of 10 years only.

The next claims to be made upon the Dominion treasury came from the new provinces of Manitoba and British Columbia, the former receiving a grant for legislative and administrative expenses of \$30,000 plus 80 cents per head on an estimated population of 17,000; also a debt allowance of \$472,090, which, since there was no debt, meant at 5 per cent, an additional payment of nearly \$24,000. British Columbia received an annual grant of \$30,000 plus 80 cents per head on an estimated population of 60,000, also a debt allowance at the rate of \$27.77 per head of population, being the revised per capita allowance to Nova Scotia. Next, Prince Edward Island came into the Confederation in 1873 with an annual allowance of \$30,000 plus 80 cents per head of the population plus a debt allowance on the basis of \$50 per head of the population (amounting to \$4,701,050), plus a special annual allowance of \$45,000 (in lieu of territorial revenue, since Prince Edward Island had practically no Crown lands) to extinguish the claims of the landlords to whom much of the land had been originally granted. This grant, however, was to be reduced by interest at 5 per cent on any sum not exceeding \$800,000 which the Dominion might contribute toward buying out the large proprietors.

The new agitation for better terms arose in 1873, at the height of a world-wide cycle of prosperity when Dominion revenues were buoyant and expanding. The remaining debt of Upper and Lower Canada (\$10,506,089) was taken over, and equivalent additions were made to the debt allowances of each of the other provinces, including increased payments in lieu of public debt in the cases of Manitoba and British Columbia. Again, in 1876 the infant province of Manitoba was granted a temporary annual increase to raise the revenue to \$90,000; in 1879 this was increased to raise the annual income to \$105,000.

In 1884, the provinces once more joined in an appeal to the Dominion for larger grants, on the ground that the readjustment of 1873 should have been retroactive to Confederation, and claiming not only arrears of capital, but interest as well. An adjustment was effected, both for the original provinces and also for the three newer provinces of Manitoba, British Columbia and Prince Edward Island. The total extra allowance charged on the Dominion treasury as a result came to \$358,000 annually.

Manitoba profited by the 1884 arrangement only to the extent of \$5,500 annually, and in 1885 renewed agitation on her part led to the passage of an act which transferred to the province the ownership of its swamp-lands, granted a land endowment to the University of Manitoba and enlarged the basis of cash subsidies. These concessions were made on condition that they should constitute a final settlement of all claims, and as a matter of fact no further concessions were made until 1898, when a further allowance was granted on account of the cost of public buildings and a government house.

When the new provinces of Alberta and Saskatchewan were created in 1905, subsidies were established as follows for each province:—\$50,000 for the support of its government and legislature, plus 80 cents per head on an estimated population of 250,000, to increase with the population until it should reach 800,000, plus 5 per cent interest on a debt allowance of \$8,107,500 (since there was no debt this gave each of the provinces an annual subsidy of \$405,375 under this heading), plus an allowance of \$375,000 in lieu of public lands, (this allowance to increase to

\*For a descriptive statement of the grounds of their protest see *Canada and its Provinces*, Vol. VII, pp. 489-490.

\$562,500 when the population reached between 400,000 and 800,000, \$750,000 when it reached between 800,000 and 1,200,000, and \$1,225,000 when it exceeded 1,200,000), plus a special annual grant of \$93,750 for five years for public buildings.

In 1907 the whole question of subsidies was once more reopened. The annual grant to the provinces for the support of their Governments and Legislatures was increased as follows according to the population of the province:—

Population	Grant
Under 150,000.....	\$100,000
150,000—200,000.....	150,000
200,000—400,000.....	180,000
500,000—800,000.....	190,000
800,000—1,500,000.....	220,000
Over 1,500,000.....	240,000

Further, the annual grant was henceforward to be paid at the rate of 80 cents per head until the population of a province exceeded 2,500,000, and at the rate of 60 cents per head on the excess. Also, an additional annual allowance of \$100,000 was granted for ten years to B.C.

The growth of Dominion allowances to the provinces since Confederation is shown by the following figures.\*

Fiscal year ended						
1868.....						\$ 2,753,966
1869.....						2,604,050
1874.....						3,752,757
1886.....						4,182,526
1899.....						4,250,636
1906.....						6,726,373
1908.....						9,032,775
1912.....						10,281,045
1922.....						12,211,924
1925.....						12,281,391

Total payments by the Dominion to the provinces from Confederation to March 31, 1925, are shown in the following table. The payments to the Maritime Provinces totalled \$71,423,920, or approximately 20 per cent.

TABLE I.—Dominion Allowances by Provinces, from July 1, 1867, to Mar. 31, 1925

Provinces	Allowance for Govern- ment	Allowance per head of Population	Special Grants <sup>1</sup>	Interest on Debt Allowance <sup>2</sup>	Total
	\$	\$	\$	\$	\$
Prince Edward Island.....	2,820,000	4,440,080	3,261,385	2,214,950	12,736,415
Nova Scotia.....	5,820,000	19,566,762	826,980	2,707,767	28,921,509
New Brunswick.....	5,240,000	14,936,546	8,430,000	1,159,450	29,765,996
Quebec.....	7,120,000	64,424,118	—	4,049,646	75,593,764
Ontario.....	7,520,000	80,840,775	—	3,604,374	91,965,149
Manitoba.....	5,025,000	11,938,035	10,782,662	9,916,342	37,662,039
Saskatchewan.....	3,516,667	9,049,564	10,593,750	8,107,500	31,267,481
Alberta.....	3,446,666	7,162,505	10,125,000	8,107,500	28,841,671
British Columbia.....	4,420,000	7,993,142	6,400,000	1,583,941	20,397,083
<b>Total</b> .....	<b>44,928,333</b>	<b>220,351,527</b>	<b>50,419,777</b>	<b>41,451,470</b>	<b>357,151,107</b>

<sup>1</sup>Compensation for lands and allowances for buildings. <sup>2</sup>Allowance in lieu of debt.

In addition to these allowances, the Dominion Government has made special grants to assist the provinces in providing facilities and services considered desirable for the benefit of the people of Canada at large. Thus we have the grant of \$10,000,000 for agricultural education (3 Geo. V, c. 5), which lapsed in 1923, the similar grant of \$10,000,000 in 10 years for the

\*Statistics for other years will be found in a table, "Principal Items of Dominion Expenditure, 1868-1925", on pp. 768-769 of the 1925 edition of the Canada Year Book.

§ From page 779 of the 1925 issue of the Canada Year Book.

assistance of technical education in 1919 (9-10 Geo. V, c. 73), and the highways grant of \$20,000,000 in five years to assist the provinces in their good roads schemes,\* the actual payments under this scheme being \$16,779,779 to March 31, 1925. Of this latter amount Prince Edward Island had received \$408,274, Nova Scotia \$1,456,431, New Brunswick \$1,163,845, or \$3,028,550 in all, or over 18 per cent of the total.

*The present Financial Position in the Dominion and the Provinces.*—In the past decade, governmental expenditure has increased in practically every country in the white man's world, partly as a consequence of the widening of men's ideas of the functions of Government, partly as a result of the decline in the purchasing power of currency units, and partly as a result of the natural growth of population. Canadian governments, national, provincial and municipal, have been no exception to the rule:

*Dominion Expenditure.*—The total estimated expenditure of the Dominion Government on all governmental services in the fiscal year ended Mar. 31, 1926, was \$342,890,000, as compared with \$144,456,878 in the fiscal year ended 1913, and \$186,241,048 in the fiscal year ended 1914, these figures including capital as well as current expenditure. Thus the expenditure of the Dominion has about doubled since before the war.

However, an analysis of the 1926 expenditure will show† that the 1926 expenditure arising out of and attributable to the war was no less than \$163,977,000, for interest on war debt, pensions, soldiers civil re-establishment, etc.—all of them items which had no existence before the war. Subtracting the \$163,997,000 from the \$342,890,000, we have a total expenditure for all the ordinary activities of the government of \$178,893,000, or somewhat less than was spent in 1914, notwithstanding that (a) the population of Canada has considerably increased since 1914, and (b) that the dollar of 1926 has only about two-thirds of the purchasing power of the dollar of 1914—governments like individuals having to buy the commodities and services which they use at the prevailing scale of prices§.

*Provincial Expenditures.*—Provincial finances, of course, like those of the Dominion, have been affected by the increase of population and by the diminished purchasing power of the dollar, both operating in the direction of increasing their expenditures, though the Dominion has under the constitution borne the whole burden of the expenditures directly attributable to the war.

Taking the nine provinces together, ordinary expenditures in their fiscal years ending in 1914 aggregated \$57,108,888. During the first years of the war there was a tendency toward reduction, and in 1916 the total was \$53,826,219. Thereafter provincial expenditure increased very rapidly, aggregating \$135,159,185 in 1924. Preliminary figures for 1925 show a slight increase to \$136,648,242. It will be seen that the total increase since 1914 is over two and one-half times—in exact terms 153 per cent. Dominion and provincial expenditures cannot of course, be controlled with the same degree of immediate effectiveness.

To assist in the purview of provincial finance attention may be directed at this point to Tables II and III herewith. They show ordinary provincial revenues and expenditures (grand totals and per capita, respectively), by decades in the Census years back to Confederation, and by single years from 1916 to date.

*Provincial Expenditures in the Maritimes.*—Tables II and III differentiate provincial expenditures in the three Maritime Provinces. To enable the details of these expenditures to be examined over the past ten years Table IV has been added.

It will be seen that whilst provincial expenditures in general have gone up from \$53 millions per annum in 1916 to \$136 millions in 1925, or 153 per cent as previously noted, those of Prince Edward Island have gone up from \$453 thousand to \$745 thousand, or 64 per cent; those of Nova Scotia from somewhat over \$2 millions to nearly \$6 millions, or 177 per cent; and those of New Brunswick from \$1½ millions to over \$4 millions, or 162 per cent.

\*The period of operation of this scheme has been extended to April 1, 1928.

†See Hansard for April 15, 1926; pp. 2540—41.

§It might be added that of the \$164,000,000 of expenditure arising out of the war, at least \$140,000,000 goes back to the citizens of Canada as interest, pensions, etc.

TABLE II.—Ordinary Revenues and Expenditures of Provincial Governments for their respective fiscal years ended in the census years, 1871-1911 and in each year from 1916 to 1925

ORDINARY RECEIPTS

Years	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewa	Alberta	British Columbia	All Provinces
1871.....	\$ 385,014	\$ 525,824	\$ 451,076	\$ 1,632,032	\$ 2,333,180	\$ 121,867	\$ -	\$ -	\$ 191,820	\$ 5,158,946
1881.....	275,380	476,445	607,445	3,191,779	2,788,747	590,484	590,484	590,484	397,035	7,858,698
1891.....	274,047	661,541	612,762	3,457,144	138,589	1,008,633	1,008,633	1,008,633	959,248	10,693,815
1901.....	309,445	1,090,250	1,031,267	4,563,432	4,466,014	4,454,190	2,699,603	2,699,603	1,605,920	14,074,991
1911.....	374,798	1,625,633	1,347,077	7,032,745	9,370,834	5,897,807	4,801,064	5,281,695	10,492,892	40,706,948
1916.....	508,455	2,165,338	1,810,719	9,644,384	13,841,339	5,631,910	6,260,406	6,260,406	6,291,694	50,195,740
1917.....	496,053	2,118,620	1,572,814	10,441,114	18,269,597	6,292,986	7,797,153	7,660,762	6,906,784	57,989,984
1918.....	514,475	2,332,634	2,357,909	13,806,392	19,270,122	6,723,013	8,333,739	8,333,739	8,882,845	69,345,305
1919.....	501,915	2,280,313	2,482,420	12,666,732	20,692,166	8,613,364	9,903,855	9,903,855	10,317,739	76,844,279
1920.....	740,973	3,801,016	3,100,892	14,472,651	25,981,517	9,870,710	9,870,710	9,870,710	13,861,603	92,633,023
1921.....	769,719	4,586,905	3,822,905	15,914,521	30,411,396	9,358,956	11,789,920	11,086,937	15,211,264	102,030,458
1922.....	748,888	4,791,208	3,226,727	21,609,396	39,225,370	7,940,457	11,801,894	9,324,880	16,987,860	116,156,699
1923.....	654,303	5,317,355	3,479,733	21,634,642	34,818,729	10,078,730	12,576,763	10,419,446	18,758,864	117,736,244
1924.....	738,431	5,461,383	3,725,286	23,170,733	41,721,961	19,926,634	12,570,411	10,506,627	19,124,580	127,896,047
1925.....	740,076	3,556,330	4,467,484	25,021,329	48,013,854	7,866,519	12,378,755	11,531,026	18,823,358	132,398,729

ORDINARY EXPENDITURE

1871.....	406,236	600,344	438,407	1,575,545	1,816,784	226,808	226,808	226,808	—	97,692
1881.....	261,276	494,582	598,844	3,566,612	2,592,800	664,432	664,432	664,432	—	378,779
1891.....	304,486	692,538	680,813	4,095,520	4,158,460	988,251	—	—	1,032,104	8,119,701
1901.....	315,326	1,088,927	910,346	4,510,554	6,424,900	4,002,826	2,575,145	3,437,088	11,628,353	14,146,059
1911.....	398,490	1,790,778	1,403,547	6,424,900	9,916,934	12,706,333	6,147,750	5,258,756	8,194,803	38,144,511
1916.....	453,151	2,152,773	1,568,340	9,436,687	16,518,223	6,860,355	5,553,965	6,752,504	10,083,505	53,826,219
1917.....	487,113	2,344,009	2,166,404	9,907,672	17,460,404	7,307,727	6,828,596	8,303,808	9,331,740	60,122,485
1918.....	484,416	2,399,062	12,371,330	21,464,575	21,464,575	8,497,942	8,125,203	9,525,740	9,887,745	66,032,909
1919.....	655,409	2,580,282	2,595,937	13,520,740	25,880,843	10,602,935	8,701,833	10,423,346	11,568,003	76,403,973
1920.....	660,774	3,916,884	2,969,323	14,624,088	28,579,688	10,063,139	12,151,665	12,151,665	8,281,675	15,236,931
1921.....	694,042	4,678,146	3,432,512	16,940,977	37,458,395	8,381,667	13,322,120	11,235,192	10,990,830	102,569,515
1922.....	687,241	4,791,998	3,648,273	19,930,276	49,305,439	10,616,567	12,886,544	12,886,544	19,736,942	112,874,954
1923.....	790,046	5,229,178	3,648,273	21,567,293	48,866,569	10,455,187	12,449,150	11,174,690	20,516,367	132,671,095
1924.....	715,882	5,719,555	3,835,522	23,629,390	51,462,178	6,824,155	12,498,933	11,249,433	20,156,702	135,648,242

<sup>1</sup> For six months only. <sup>2</sup> Twelve months ended February 28. <sup>3</sup> Twelve months ended April 30. <sup>4</sup> Includes capital revenue for lands, which cannot be separated.

<sup>5</sup> Includes capital expenditure which cannot be separated. <sup>6</sup> For eight months.

<sup>7</sup> Includes sums of capital which cannot be separated. <sup>8</sup> Includes sinking funds taken from capital (Expenditure out of Income).

TABLE III.—Ordinary Receipts and Expenditures of Provincial Governments per head of Population for their respective fiscal years ended in the census years, 1871-1911, and in each year from 1916 to 1925

NOTE.—As this table is based upon Table 23, those using it should refer to that table for totals and for explanatory notes.

(A) ORDINARY RECEIPTS

Years	Prince Edward Island	Nova Scotia	New Brun- swick	Quebec	Ontario	Mani- toba	Saskat- chewan	Alberta	British Colum- bia	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1871.....	4.09	1.36	1.58	1.37	1.44	—	—	—	5.29 <sup>1</sup>	1.53
1881.....	2.53	1.08	1.90	2.35	1.45	1.96	—	—	8.03	1.82
1891.....	2.50	1.47	1.91	2.32	1.96	3.88	—	—	9.77	2.21
1901.....	3.00	2.37	3.12	2.77	2.05	3.95	—	—	8.99	2.62
1911.....	4.00	3.30	3.83	3.50	3.71	9.65	5.48	8.84	26.73	5.65
1916.....	5.59	4.27	4.28	4.43	5.08	10.65	7.41	10.64	13.76	6.23
1917.....	5.49	4.16	4.22	4.72	6.61	11.14	8.42	12.17	14.68	7.10
1918.....	5.72	4.55	6.27	6.14	6.87	11.68	11.28	14.38	18.36	8.34
1919.....	5.61	6.35	5.74	5.54	7.27	14.67	11.69	17.50	21.99	9.08
1920.....	8.32	7.31	8.08	6.23	8.99	16.49	13.47	19.17	27.14	10.75
1921.....	8.69	8.76	7.46	6.74	10.37	15.34	15.56	18.84	29.01	11.63
1922.....	9.47	9.09	8.24	9.01	13.35	12.66	15.17	15.41	31.76	12.96
1923.....	7.43	10.03	8.80	8.87	11.53	15.81	15.78	16.78	34.48	12.98
1924.....	8.42	10.23	9.33	9.34	13.63	16.89	15.36	16.49	34.58	13.88
1925.....	8.48	8.32	8.82	9.93	15.47	11.98 <sup>2</sup>	14.86	17.69	33.58	14.16

<sup>1</sup> Six months.

<sup>2</sup> For 8 months only.

(B) ORDINARY EXPENDITURES

1871.....	4.32	1.55	1.54	1.38	1.12	—	—	—	2.70 <sup>1</sup>	1.36
1881.....	2.40	1.12	1.87	2.63	1.35	3.64	—	—	7.66	1.88
1891.....	2.77	1.54	2.12	2.75	1.97	4.36	—	—	10.51	2.41
1901.....	3.05	2.37	2.75	2.74	1.85	3.87	—	—	12.80	2.63
1911.....	4.25	3.64	3.99	3.20	3.92	8.68	5.23	9.18	20.87	5.29
1916.....	4.98	4.25	4.25	4.33	4.67	11.10	8.12	12.12	22.05	6.71
1917.....	5.39	4.60	5.82	4.48	5.97	12.15	8.30	13.12	20.26	7.36
1918.....	5.39	5.02	6.38	5.19	6.23	12.69	9.88	15.59	18.65	7.94
1919.....	7.33	6.35	6.83	5.41	7.54	14.48	11.39	17.28	19.89	9.03
1920.....	7.42	7.53	7.73	5.82	8.96	17.72	11.85	18.30	22.65	10.24
1921.....	7.83	8.93	8.85	6.19	9.74	16.49	16.04	22.28	29.05	11.69
1922.....	7.77	9.08	7.62	6.91	12.59	13.37	17.12	18.57	33.58	12.60
1923.....	8.98	9.87	9.22	8.17	16.33	16.65	16.17	17.70	35.43	14.63
1924.....	8.16	10.46	9.60	8.69	15.96	16.16	15.27	17.54	37.10	14.67
1925.....	8.54	11.12	10.20	9.38	16.58	10.40 <sup>2</sup>	15.00	17.26	35.96	14.61

<sup>1</sup> Six months.

<sup>2</sup> For 8 months only.

TABLE IV.—Details of the Expenditures of the Maritime Provinces compared with those of all Provinces, 1916-1925.

Year	Expenditures on Civil Government				Expenditure on Mines and Mining				
	9 provinces	P.E.I.	N.S.	N.B.	Year	9 provinces	P.E.I.	N.S.	N.B.
1916....	4,011,701	27,351	123,525	68,342	1916....	239,095	—	42,584	2,425
1917....	4,156,582	24,814	126,796	79,400	1917....	240,100	—	40,472	717
1918....	4,433,263	25,362	142,019	99,450	1918....	365,427	—	21,271	920
1919....	5,631,886	29,988	168,773	123,173	1919....	345,482	—	23,418	3,759
1920....	6,833,933	42,677	215,455	145,720	1920....	406,872	—	33,442	998
1921....	7,928,897	37,102	262,195	146,270	1921....	359,580	—	42,129	4,524
1922....	8,380,037	33,472	264,257	153,095	1922....	297,957	—	42,914	2,325
1923....	8,470,561	31,471	268,668	161,334	1923....	415,336	—	43,037	2,113
1924....	8,415,915	35,079	299,845	160,930	1924....	393,380	—	50,023	1,407
1925....	8,334,525	37,711	297,576	160,265	1925....	422,252	—	75,824	1,715

TABLE IV.—Details of the Expenditures of the Maritime Provinces compared with those of all Provinces, 1916-1925—Continued

Year	Expenditure on Health and Sanitation				Year	Expenditures on Legislation			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
1916....	149,004	751	—	—	1916....	1,833,100	17,725	102,971	54,921
1917....	171,293	1,610	—	412	1917....	2,036,330	18,822	97,092	88,236
1918....	270,200	2,382	—	5,731	1918....	1,864,508	17,999	88,618	59,650
1919....	395,325	4,304	—	—	1919....	1,976,644	24,460	104,900	59,536
1920....	575,971	956	3,618	—	1920....	2,177,944	31,729	142,865	117,936
1921....	734,281	786	3,058	15,085	1921....	2,658,339	32,546	155,155	96,292
1922....	928,153	536	4,128	9,122	1922....	2,512,503	29,474	123,399	98,465
1923....	1,054,593	689	4,763	11,039	1923....	3,009,279	36,367	120,291	97,559
1924....	952,506	493	4,518	15,244	1924....	2,191,494	28,246	132,938	97,969
1925....	923,284	8,662	3,160	19,022	1925....	2,608,859	26,357	157,666	123,646
Year	Expenditure on Forests, Timber and Woods				Year	Expenditure on Public Buildings, Works, etc.			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
1916....	861,072	—	2,550	30,095	1916....	10,652,373	63,065	356,499	354,303
1917....	955,176	—	2,550	27,648	1917....	11,076,102	69,007	403,665	527,225
1918....	1,114,572	—	2,600	35,068	1918....	10,825,544	66,612	460,772	544,871
1919....	1,279,776	—	2,600	84,432	1919....	13,355,274	159,561	871,717	821,741
1920....	1,521,098	—	3,050	123,233	1920....	15,678,016	130,078	1,134,696	908,962
1921....	1,431,103	—	3,050	215,941	1921....	16,387,111	119,834	1,123,933	942,644
1922....	1,683,319	—	3,112	85,772	1922....	14,781,083	98,813	1,089,965	688,537
1923....	2,309,134	—	2,987	175,663	1923....	21,115,068	147,627	1,082,898	1,058,371
1924....	2,945,063	—	3,050	141,003	1924....	21,574,006	103,154	1,396,845	1,076,649
1925....	2,701,595	—	3,050	114,518	1925....	22,043,571	118,705	1,510,482	1,135,118
Year	Expenditures on Agriculture				Year	Expenditures on Game and Fisheries			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
1916....	1,937,679	15,099	35,798	49,072	1916....	372,854	—	1,500	31,858
1917....	2,058,197	12,660	36,960	76,209	1917....	374,944	—	1,500	36,427
1918....	2,724,702	16,928	42,641	251,089	1918....	630,246	—	1,500	38,422
1919....	2,909,816	26,066	58,461	84,482	1919....	701,550	—	1,500	47,689
1920....	2,775,713	17,621	46,116	92,912	1920....	663,189	—	1,500	49,654
1921....	3,371,937	26,659	72,733	66,639	1921....	627,680	—	—	31,250
1922....	3,772,219	38,181	46,745	61,625	1922....	557,030	—	2,166	28,790
1923....	3,493,994	25,600	46,621	69,324	1923....	689,976	—	3,582	34,446
1924....	3,844,709	29,450	54,670	80,283	1924....	690,980	—	5,877	41,541
1925....	3,897,191	25,286	68,843	90,110	1925....	684,130	—	7,535	52,222
Year	Expenditure on Education				Year	Expenditures on Lands			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
1916....	9,964,552	173,309	508,957	313,409	1916....	427,274	—	266	4,015
1917....	10,580,647	176,952	527,272	319,906	1917....	427,596	—	115	3,568
1918....	11,143,005	170,913	522,941	329,564	1918....	456,400	—	64	6,068
1919....	12,541,624	183,344	531,104	326,275	1919....	620,767	—	94	6,205
1920....	15,902,175	209,478	610,870	362,067	1920....	770,821	—	146	10,295
1921....	20,474,528	246,401	776,044	465,522	1921....	978,247	—	71	17,107
1922....	22,830,227	273,978	721,528	450,918	1922....	885,069	—	96	9,539
1923....	25,716,519	301,045	780,823	485,180	1923....	851,402	—	253	5,318
1924....	25,427,469	281,795	791,291	525,280	1924....	821,590	—	329	5,862
1925....	24,784,845	293,431	793,782	585,082	1925....	1,059,410	—	4,152	5,635
Year	Expenditures on Administration of Justice, etc.				Year	Expenditures on Hospitals			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
1916....	5,182,299	30,412	25,660	46,557	1916....	3,936,834	60,752	314,074	142,225
1917....	5,314,091	30,262	25,670	44,059	1917....	4,837,677	90,038	352,288	176,978
1918....	5,272,813	26,799	28,333	40,216	1918....	5,758,117	91,361	501,962	208,444
1919....	5,560,157	29,015	32,410	59,531	1919....	6,850,623	121,385	668,257	186,059
1920....	6,588,441	34,010	38,095	46,407	1920....	8,099,518	121,866	751,215	213,717
1921....	7,890,601	33,662	58,243	53,443	1921....	8,864,362	120,559	847,568	210,305
1922....	7,388,586	36,130	71,027	48,313	1922....	8,908,974	104,364	825,967	225,842
1923....	8,272,640	34,318	97,016	54,930	1923....	10,155,217	130,181	823,541	227,425
1924....	7,304,243	32,913	44,359	47,828	1924....	9,734,092	108,586	780,119	298,543
1925....	7,225,133	31,027	69,629	66,228	1925....	10,079,063	105,142	811,595	298,455

TABLE IV.—Details of the Expenditures of the Maritime Provinces compared with those of all Provinces, 1916-1925—Concluded

Year	Expenditure on Correctional Institutions				Year	Expenditure on Colonization, Immigration, Publicity			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
	621,120	-	-	-	1916	214,201	-	10,341	11,211
1916	621,120	-	-	-	1917	251,096	-	10,339	13,498
1917	759,735	-	-	-	1918	250,230	-	10,778	8,356
1918	933,329	-	-	-	1919	282,788	-	12,587	8,613
1919	1,188,242	-	-	-	1920	344,110	-	16,430	8,507
1920	1,182,856	-	-	-	1921	600,115	-	19,651	7,695
1921	1,502,564	-	-	-	1922	809,437	-	19,271	6,687
1922	1,781,465	-	-	-	1923	557,330	-	20,081	4,933
1923	1,801,009	-	-	-	1924	1,021,360	-	22,121	3,350
1924	1,584,997	-	-	-	1925	452,021*	-	19,641	5,596
1925	1,618,057	-	-	-					
Year	Miscellaneous Payments				Year	Expenditure on Charities			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
	3,910,534	13,543	49,938	64,910	1916	668,128	4,545	15,175	2,972
1916	3,910,534	13,543	49,938	64,910	1917	681,587	5,730	16,477	2,572
1917	5,337,664	9,715	58,684	61,331	1918	751,088	5,669	17,755	5,700
1918	6,410,059	9,941	66,115	66,647	1919	804,988	5,385	21,434	8,619
1919	8,162,984	20,000	80,136	92,553	1920	961,200	4,961	29,601	29,006
1920	7,023,767	9,908	135,822	121,255	1921	987,909	5,349	30,813	30,583
1921	4,996,269	11,049	118,363	209,943	1922	1,107,670	5,320	34,277	29,904
1922	4,936,467	6,288	123,054	96,775	1923	869,607	6,093	28,725	21,799
1923	4,234,750	11,906	131,620	125,400	1924	1,038,702	4,797	30,809	24,558
1924	3,951,071	11,309	106,865	108,904	1925	1,115,620	5,774	26,513	25,840
Year	Refunds				Year	Expenditures on Pensions, Gratuities, Reliefs			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
	159,697	-	5,331	1,719	1916	197,144	700	9,284	6,533
1916	126,599	4	13,151	1,592	1917	277,224	700	9,076	5,883
1917	123,483	70	15,056	905	1918	456,658	700	7,974	17,561
1918	305,884	400	12,224	2,607	1919	521,977	700	8,350	10,110
1919	373,777	-	15,894	1,060	1920	841,270	992	9,578	17,873
1920	455,389	-	13,645	-	1921	1,377,429	1,408	10,659	11,343
1921	322,388	915	8,359	-	1922	3,159,081	700	10,464	11,085
1922	425,102	-	12,193	-	1923	4,512,160	700	16,427	10,425
1923	497,864	-	3,701	-	1924	4,234,536	350	19,183	44,160
1924	455,004	-	2,275	-	1925	3,975,226	550	20,934	12,169
Year	Interest Payments				Year	Expenditure on Amusements			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
	7,817,844	45,899	505,642	351,005	1916	42,082	-	2,009	1,150
1916	9,420,183	46,799	540,139	686,714	1917	59,203	-	3,921	1,300
1917	10,575,841	49,680	560,987	644,438	1918	321,099	-	4,963	4,626
1918	11,925,832	50,801	599,211	628,892	1919	406,410	-	6,280	10,346
1919	14,591,458	56,498	616,643	679,264	1920	267,779	-	10,322	9,287
1920	19,818,266	58,687	861,564	814,019	1921	200,992	-	11,914	15,466
1921	26,496,794	59,070	1,030,239	886,750	1922	149,055	-	11,541	10,373
1922	31,503,315	64,050	1,327,322	954,019	1923	212,555	-	12,559	11,961
1923	35,115,364	69,240	1,383,616	1,011,865	1924	192,806	-	11,549	11,055
1924	35,795,926	66,474	1,639,057	1,107,098	1925	267,992	-	11,608	8,453
Year	Sinking Funds				Year	Expenditure on Amusements			
	9 provinces	P.E.I.	N.S.	N.B.		9 provinces	P.E.I.	N.S.	N.B.
	627,632	-	-	-	1916	40,669	-	-	-
1916	980,459	-	-	-	1917	77,852	-	-	-
1917	1,372,325	-	-	-	1918	77,448	-	-	-
1918	635,944	-	-	-	1919	76,826	-	-	-
1919	670,767	-	-	-	1920	103,490	-	-	-
1920	943,416	-	-	-	1921	267,358	-	-	-
1921	1,187,438	-	-	-	1922	359,489	-	-	-
1922	3,001,549	-	-	-	1923	405,768	-	-	-
1923	3,227,038	10,470	-	-	1924	437,820	-	-	-
1924	3,638,961	15,720	-	-	1925	241,325	-	-	-
1925									

\*Decrease for 1925 as compared with 1924 is due to amount of \$506,040 which was grant to cover deficit on Land Settlement Board in 1924 in British Columbia.

*The Division of Powers and of Fields of Taxation.*—As already indicated, the desirability and the utility of the objects on which these increasing sums are being spent are for the people of each province to decide under the British North America Act. Inasmuch, however, as the British North America Act laid down the field of direct taxation as that by which the provinces should raise their needed revenues, it will be of interest to supplement the general figures on revenues contained in Table III by a special statement showing the total and per capita receipts of the provinces derived from taxation during recent years. These are set out in Table V compiled in the Financial Statistics Branch of the Dominion Bureau of Statistics in co-operation with the provincial governments—1916 being the earliest year for which such information is available. That the provinces of Canada are more and more resorting to direct taxation is the outstanding feature of this table, more than four times as much provincial revenue being collected by taxation in 1925 as in 1916.

*Further Examination of Provincial Taxation—Municipal Taxation.*—A general view of recent provincial taxation is given in Table V. The subject, however, is so important in its implications that more detailed analysis of the existing situation is desirable. It is desirable, for example, to provide a means of comparison between the taxation systems of the various provinces so as to note the varying methods in which direct taxation has been applied. The principal sources of provincial taxation in Canada are: taxes on corporations; succession duties; taxes on property; taxes on incomes (Prince Edward Island, British Columbia and Manitoba); taxes on land transfers (Ontario); gasoline tax (in all provinces except New Brunswick and Saskatchewan); amusement tax; automobiles licenses; revenue from liquor control; and miscellaneous licenses. Table VI, on pages 124 and 125 assembles these and other items of taxation in all the provinces for the year 1925.

It is evident from Table VI that great differences prevail between the revenue systems of the various provinces. In analyzing the table, however, it would not be fair to apportion criticism to a province for the absence of any particular tax on the ground that it is failing to develop that particular source of revenue. Rather is it necessary to consider the tax system as a whole, with a view to ascertaining whether as such it is well balanced and adequate. A more legitimate method is to compare total tax receipts per capita. In this comparison it is necessary to include municipal taxation as well as provincial, since the service defrayed by provincial taxation in one province may be met out of municipal taxation in another though it may matter little to the taxpayer to which the payment is made. Figures for provincial taxation as given by the annual reports of the provincial treasurers are analysed on a uniform basis by the Financial Statistics Branch of the Bureau of Statistics. For municipal tax receipts it is more difficult to make comparisons, as provincial statistics are available for six provinces only. The figures in Table VII, (p. 126) however, are believed to be fairly complete.

It appears from Table VII that municipal tax receipts per head are less in Nova Scotia than in any other of the six provinces which can be compared in this way, also that combined municipal and provincial taxes are least for Nova Scotia. It must of course be remembered that considerable areas in all the provinces have no municipal organization and consequently no municipal taxation; in these areas the burden of taxation is less, but naturally the benefits derived from the community are correspondingly less; e.g. various services such as water supply and fire protection, commonly provided out of taxation by the municipality, must be provided by private initiative or foregone. Moreover, the larger the city, the more numerous the services it renders to the taxpayers, and consequently the higher the municipal taxes. In comparing a largely rural province, having no large cities, with a highly urbanized one, we should therefore expect the municipal taxation per capita to be higher in the latter.

A fairer comparison of the per capita burden of municipal taxation in the different provinces can perhaps be made by limiting it to cities and towns of specified size. For 1922, reports on municipal statistics have been published by the Dominion Bureau of Statistics dealing (1) with places having a population of 5,000 and over, and (2) with places having a population of 1,000 to 5,000. No special statistics are available for places having a population of less than 1,000. The results of these comparisons are given in Tables VIII and IX respectively.

(Continued on page 126-127)

TABLE V.—Total and per Capita Receipts from Taxation for the Years 1916, 1920 to 1925 by Provinces

## TOTAL RECEIPTS

	1916	1920	1921	1922
	\$	\$	\$	\$
Prince Edward Island.....	115,029	339,533	370,683	328,290
Nova Scotia.....	291,772	993,886	1,359,044	1,582,948
New Brunswick.....	275,001	647,663	796,935	1,403,740
Quebec.....	3,810,426	6,335,701	6,509,520	11,461,385
Ontario.....	6,494,904	11,985,496	13,772,396	19,552,564
Manitoba.....	936,628	2,081,224	2,641,113	3,946,514
Saskatchewan.....	686,750	4,464,934	5,018,776	4,916,648
Alberta.....	1,062,419	4,586,355	3,773,505	4,554,007
British Columbia.....	2,045,217	7,575,414	6,936,554	8,917,661
All Provinces.....	15,718,146	39,010,206	41,178,526	56,663,757
	1923	1924	1925	
	\$	\$	\$	
Prince Edward Island.....	254,352	333,995	330,436	
Nova Scotia.....	1,961,890	1,949,501	1,689,077	
New Brunswick.....	1,415,916	1,398,598	1,481,449	
Quebec.....	11,787,109	11,988,255	12,460,041	
Ontario.....	15,794,908	17,866,148	22,238,322	
Manitoba.....	4,142,716	5,122,579	(a) 4,087,832	
Saskatchewan.....	5,145,041	5,697,307	5,587,534	
Alberta.....	5,731,016	5,909,146	6,646,495	
British Columbia.....	9,906,932	10,811,824	10,393,115	
All Provinces.....	56,139,880	61,077,354	64,914,301	

## PER CAPITA RECEIPTS

	1916	1920	1921	1922
	\$	\$	\$	\$
Prince Edward Island.....	1.27	3.81	4.18	3.71
Nova Scotia.....	0.58	1.91	2.59	3.00
New Brunswick.....	0.75	1.69	2.05	3.58
Quebec.....	1.75	2.73	2.76	4.78
Ontario.....	2.39	4.15	4.69	6.57
Manitoba.....	1.69	3.48	4.33	6.29
Saskatchewan.....	1.06	6.07	6.63	6.32
Alberta.....	2.14	8.05	6.41	7.53
British Columbia.....	4.47	14.83	13.22	16.67
All Provinces.....	1.96	4.53	4.69	6.35
	1923	1924	1925	
	\$	\$	\$	
Prince Edward Island.....	2.89	3.81	3.79	
Nova Scotia.....	3.70	3.65	3.15	
New Brunswick.....	3.58	3.50	3.67	
Quebec.....	4.83	4.83	4.94	
Ontario.....	5.23	5.83	7.17	
Manitoba.....	6.50	7.92	(a) 6.23	
Saskatchewan.....	6.46	6.99	6.71	
Alberta.....	9.23	9.28	10.20	
British Columbia.....	18.21	19.55	18.54	
All Provinces.....	6.19	6.63	6.94	

(a) Manitoba receipts are for eight months only.

TABLE VI.—Ordinary Taxation Receipts, 1925

Sources of Receipts from—	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
\$ cts.									
Taxation of Corporations—									
Financial—									
Banks.....	12,421 74	71,003 06	29,554 83	—	524,544 01	57,697 03	—	70,959 00	—
Land Companies.....	—	5,385 13	1	—	—	9,635 07	—	4,311 33	—
Loan Companies Register.....	—	—	—	—	61,117 33	26,930 45	—	12,649 52	—
Loaning Land Companies Register.....	—	—	—	—	—	—	—	—	—
Trust Companies Register.....	—	—	—	—	—	—	—	—	—
Trust Companies Register.....	2	809 00	7,689 57	2,450 00	1,649 20	46,531 86	16,924 02	—	5,697 63
—	—	—	—	—	5,150 00	—	—	—	—
Insurance—									
Fire Insurance Companies.....	10,700 01	63,408 05	{ 46,232 09	—	282,750 85	42,292 13	—	—	—
Guarantee and Accident Insurance Companies.....	837 50	7,297 08	{ 7,297 08	—	—	—	—	—	—
Life Insurance Companies.....	3,698 38	97,144 15	{ 50,441 90	—	543,342 77	165,873 11	75,478 23	237,651 82	{
Sundry Miscellaneous Insurance Companies.....	—	—	—	—	33,102 44	—	—	—	—
Insurance Act—									
Friendly Societies Register.....	—	—	—	—	81,483 75	{ 3,175 60	—	—	—
Insurance Companies Register.....	—	—	—	—	—	{ 70,972 50	—	—	—
Miscellaneous Insurance Act.....	—	—	—	—	—	{ 52,573 41	—	—	—
Other Corporations—									
Car Companies.....	—	—	—	—	—	12,077 45	—	—	—
Commercial Corporations, etc.....	—	—	—	—	—	—	—	—	—
Elevator Companies.....	—	—	—	—	—	—	—	—	—
Express Companies.....	17,500 00	560 00	—	—	36,400 00	3,615 00	—	40,100 00	—
Gas and Electric Companies.....	52,042 84	—	—	—	71,388 02	100 00	—	6,523 59	—
Light and Power Companies.....	1,043 81	—	—	—	720,596 70	100 00	—	11,413 21	—
Railways.....	22,327 93	58,220 00	—	—	327,599 47	206,520 00	—	190,435 19	—
Steamship Companies.....	150 00	—	—	—	10,142 13	10,774 73	—	—	—
Street Railways.....	—	—	5,213 38	—	1,261 54	4,101 24	—	4,711 33	—
Telegraph Companies.....	800 00	8,475 34	2,078 22	—	77,479 59	39,072 04	—	—	—
Telephone Companies.....	2,348 66	66,062 16	22,052 98	—	—	—	515,272 59	105,250 31	—
Miscellaneous Companies.....	181,443 49	—	—	—	—	—	—	—	—
Succession Duties.....	15,288 90	253,407 56	290,539 72	2,423,149 20	5,786,893 22	592,257 05	287,697 71	459,650 39	703,890 27
Other Taxations—									
Brokers Tax.....	975 00	—	—	—	—	165 11	—	—	—
Education Tax, Trust Account, "D".....	—	—	—	—	76,128 39	—	—	178,453 27	—
Fire Marshall Tax.....	—	—	—	—	—	—	—	—	—
Fuel-oil Tax.....	3,902 36	—	—	—	652,576 86	1,974,434 10	102,371 12	130,364 54	—
Gasoline Tax.....	35,104 66	85,260 08	—	—	—	—	113,023 29	311,403 67	476,700 79
Income Tax.....	—	—	—	—	—	—	—	—	—
Land Tax.....	—	—	—	—	—	—	—	43,980,950 19	—
Land Transfer Tax.....	—	—	—	—	—	—	—	—	—
Leased Land and Educational Tax.....	—	—	—	—	—	—	—	—	—
Luxury Tax.....	—	—	—	—	—	—	—	—	—
Personal Property Tax.....	—	—	—	—	—	—	—	20,352 61	—
—	3 17,220 80	—	—	—	—	—	—	—	—

TABLE VI.—Ordinary Taxation Receipts, 1925—Concluded.

27719-10

Sources of Receipts from—	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Other Taxations—Concluded.</i>									
Poll Tax.....	—	—	—	—	—	—	—	—	171,679 44
Public Revenues Tax.....	\$ 91,302 44	—	—	—	—	—	2,358,784 82	—	—
Real Property Tax.....	—	—	—	—	—	—	—	—	1,101,338 01
Bural District School Tax.....	—	—	—	—	86,174 86	—	—	—	14,662 40
Stamp Tax, Transfer of Securities.....	—	—	—	—	—	—	—	—	—
Timber Area Tax.....	—	—	—	129,666 49	—	—	1,631 33	—	—
Timber Birth's Taxation Act.....	—	—	55,602 62	—	—	43,415 12	707,724 11	—	—
Transfer of Shares, Bonds, etc.....	—	—	—	—	—	12 07	—	509,398 96	715,064 62
Wild Land Tax.....	38,271 91	—	—	—	—	—	—	17 95	—
Other unenumerated taxes including arrears.....	—	—	—	—	—	—	—	—	—
<b>TOTAL TAXATION.....</b>	<b>221,964 76</b>	<b>936,749 36</b>	<b>571,132 82</b>	<b>5,749,536 12</b>	<b>11,308,394 59</b>	<b>72,834,839 75</b>	<b>4,186,626 57</b>	<b>3,801,979 99</b>	<b>7,357,293 71</b>
<i>Licenses and permits—</i>									
Auctioneers Licenses.....	—	—	—	—	—	—	6,584 83	6,325 00	—
Dog Licenses.....	—	—	—	221,284 53	—	1,825 00	—	13,797 50	2,701 45
Licensed Hotels, Shops, etc.....	—	—	—	—	—	—	—	—	—
Liquor Traffic Control, inc. Hotel and Shop Licenses and Government Commission Account.....	45,000 00	51,820 41	352,861 65	3,975,851 90	1,045,004 59	520,483 75	30,586,38	1,631,043 81	8 1,312,061 67
Motor Vehicles.....	58,277 66	575,396 54	500,592 63	2,492,632 94	5,593,655 93	437,800 00	1,296,594 60	940,771 35	1,125,060 14
Peddlers' Licenses.....	—	—	—	—	—	—	35,371 63	5,150 00	—
Recreation and Amusement—	—	—	—	—	—	—	—	—	—
Amusement Tax.....	4,762 21	110,611 00	48,698 53	20,736 00	1,459,144 37	183,653 74	133,331 44	234,930 86	—
Moving Pictures.....	—	8,905 02	7,993 73	—	114,549 88	7,219 50	30,182 35	11,697 00	20,265 40
Pool and Billiard Rooms.....	—	—	—	—	—	2,702,407 25	—	16,513 00	—
Race Track Meetings.....	—	3,728 90	—	—	—	670 00	—	—	313,153 08
Theatre Licenses.....	—	1,865 56	170 00	—	—	7,905 00	1,474 00	12,245 00	—
Travelling Show Licenses.....	—	—	—	—	—	1,081 00	1,330 00	14,340 50	27,022 50
Other Trade or Business Licenses.....	211 00	—	—	—	—	—	—	—	—
<b>TOTAL LICENSES AND PERMITS.....</b>	<b>108,470 87</b>	<b>752,327 43</b>	<b>910,316 46</b>	<b>6,710,505 36</b>	<b>10,929,927 52</b>	<b>71,152,991 99</b>	<b>1,400,907 79</b>	<b>2,844,514 60</b>	<b>3,035,821 10</b>
<b>TOTAL TAXATION, LICENSES AND PERMITS.....</b>	<b>330,455 63</b>	<b>1,689,076 79</b>	<b>1,481,449 28</b>	<b>12,460,041 48</b>	<b>22,258,322 11</b>	<b>74,087,831 74</b>	<b>5,587,534 36</b>	<b>6,646,494 59</b>	<b>10,393,114 81</b>

<sup>1</sup> Included with Trust Companies.<sup>2</sup> Including Loan Companies.<sup>3</sup> These items include Discounts, Collector's Commissions, Postage, etc. of \$12,910.39 which has been deducted from the totals.<sup>4</sup> Including Personal Property Tax.<sup>5</sup> Included with Income Tax.<sup>6</sup> Surplus of Collections over advances.<sup>7</sup> For eight (8) months only.<sup>8</sup> This amount represents "Permits" and "Prov. Share of Profits" under the "Govt. Liquor Act".

Note.—A gasoline tax of 3 cents a gallon is now in force in Nova Scotia and returns from this tax will appear for the first time in the 1926 returns.

TABLE VII.—Provincial and Municipal Taxation per Head in six Provinces Publishing Provincial Statistics of Municipal Finance.

Province	Population 1925 estimated	Municipal tax receipts	Municipal tax receipts per head	Provincial tax receipts per head	Total mun- icipal and provincial tax receipts per head
		\$	\$	\$	\$
Prince Edward Island.....	87,300	Not available	—	3.79	—
Nova Scotia.....	536,900	5,583,812	10.40	3.15	13.55
New Brunswick.....	403,300	Not available	—	3.67	—
Quebec.....	2,520,000	“	—	4.94	—
Ontario.....	3,013,000	(a) 103,756,286	29.90	7.17	37.07
Manitoba.....	656,400	(b) 18,265,773	27.83	6.23	34.06
Saskatchewan.....	833,000	10,199,470	12.26	6.71	18.97
Alberta.....	651,700	9,856,021	15.11	10.20	25.31
British Columbia.....	560,500	14,748,216	26.30	18.54	44.84

(a) Taxes and Rates. (b) Total tax imposed for all purposes. Tax receipts for N.S., Man., and B.C. are for 1925; other provinces 1924.

TABLE VIII.—Provincial and municipal taxation, per capita, for residents of urban municipalities having a population of 5,000 or over, in each province.

(The provincial figures relate to the year 1925 and the municipal figures to 1922 in each case)

—	Municipal taxes per head, 1922	Provincial taxes per head, 1925	Total
	\$	\$	\$
Prince Edward Island.....	11.19	3.79	14.98
Nova Scotia.....	23.57	3.15	26.72
New Brunswick.....	21.68	3.67	25.35
Quebec.....	26.78	4.94	31.72
Ontario.....	41.02	7.17	48.19
Manitoba.....	40.34	6.23	46.57
Saskatchewan.....	47.50	6.71	54.21
Alberta.....	58.50	10.20	68.70
British Columbia.....	42.18	18.54	60.72
All provinces.....	36.64	6.94	43.58

TABLE IX.—Provincial and municipal taxation per capita, for residents of urban municipalities having a population of 1,000 to 5,000 in each province.

(Provincial figures relate to 1925 and urban figures to 1922 in each case)

Province	Municipal taxes per head, 1922	Provincial taxes per head, 1925	Total
	\$	\$	\$
Prince Edward Island.....	9.68	3.79	13.47
Nova Scotia.....	12.42	3.15	15.57
New Brunswick.....	14.89	3.67	18.56
Quebec.....	9.73	4.94	14.67
Ontario.....	24.04	7.17	31.21
Manitoba.....	26.05	6.23	32.28
Saskatchewan.....	36.60	6.71	43.31
Alberta.....	25.80	10.20	36.00
British Columbia.....	20.56	18.54	39.10
All provinces.....	19.83	6.94	26.77

From Table VIII it again appears that local taxes per head in the Maritimes in 1925 were lower than in the other provinces. Municipal taxes (for municipalities of 5,000 or more population) in 1922 were about one-half of the average for all provinces. The provincial and muni-

cipal taxes combined for municipalities of this size in Nova Scotia were about 61 per cent of the average for the Dominion. The lowness of municipal taxation in Prince Edward Island may be partly attributed to the fact that the cost of education in that province is chiefly met by the province and not by the local areas as in other provinces.

Comparing Table IX with Table VIII, it is evident that the municipal taxes of localities having a population of 1,000 to 5,000 were, as would be expected, much lower than those of places with a population exceeding 5,000. In this field also, the taxes of the Maritimes per head were the lowest of the Dominion. It is suggested that the general subject of provincial taxation be considered in the light of the data on wealth and income presented in Chapter V.

Certain special aspects of the financial relations of the Dominion and the Maritime Provinces, which have been the subject of discussion and on which it may be convenient to have the available data assembled, are dealt with in Appendices I, II, and III of this Chapter, which deal respectively with the expenditures on Railways and Canals in the Maritimes; Dominion Expenditures on Public Works; and credits claimed by the Maritime Provinces for non participation in Dominion lands.

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#### Appendix I—Expenditures on Railways and Canals

The total capital expenditure of the Dominion Government on railways up to March 31, 1925, as given on page 80 of the Report of the Department of Railways and Canals for that year, was \$495,956,176.54. This figure includes \$35,906,042.55 spent on the rolling stock of the Canadian Government Railways. When the expenditures on construction and equipment is pro-rated according to mileage in each province, the capital expenditure in each of the Maritime Provinces is estimated to have been as follows:—

	\$
Prince Edward Island.....	13,756,255
Nova Scotia.....	62,153,904
New Brunswick.....	75,700,873

The total for the Maritime Provinces is thus \$151,611,032 being 30.6 per cent of the grand total.

While the Maritime Provinces have thus received a share of the capital expenditure on railways which is large relatively to population, the expenditure for canals in these provinces has been very small. According to the appended table, the total capital expenditure for construction and enlargement of canals up to March 31, 1926 has been \$175,812,316, of which \$20,593,866 was expended before Confederation. The only canal situated in the Maritime Provinces is St. Peters Canal in Cape Breton Island, and the total expenditure on this has been only \$648,547, or about 0.37 per cent of the total.

When the capital expenditures on railways and canals are added together, the grand total is found to be \$671,768,492, of which \$152,259,579 is found to have been expended in the Maritime Provinces, being about 22.6 per cent of the aggregate. It is to be remembered, however, that railway aids of different kinds are not included in this statement, nor are land grants to railways so included. To valuate these aids and grants at the time they were made would be a long and difficult process.

CAPITAL EXPENDITURE FOR CONSTRUCTION AND ENLARGEMENT OF CANALS FOR THE FISCAL YEARS 1868-1926 AND BEFORE CONFEDERATION

Canals	Expenditure previous years	Expenditure 1926	Total expenditure
	\$	\$	\$
Beauharnois.....	1,636,029	—	1,636,029
Carillon and Grenville <sup>1</sup> .....	4,191,756	—	4,191,756
Chambly.....	780,996	—	780,996
Cornwall.....	7,246,304	—500 <sup>2</sup>	7,246,804
Culbute Lock and Dam.....	382,391	—	382,391
Lachine.....	14,132,685	—	14,132,685
Lake St. Francis.....	75,907	—	75,907
Lake St. Louis.....	298,176	—	298,176
Murray.....	1,248,947	—	1,248,947
Rideau.....	4,214,264	—	4,214,264
Sault Ste. Marie.....	4,935,809	—	4,935,809
Soulanges.....	7,904,044	—	7,904,044
Ste. Anne Lock and Canal.....	1,270,216	50,000	1,320,216
St. Lawrence River and Canals—			
North Channel.....	1,995,143	—	1,995,143
River Reaches.....	483,830	—	483,830
Galope Channel.....	1,039,896	—	1,039,896
St. Lawrence Ship Canal.....	135,777	—1,709	134,068
St. Ours Lock.....	127,229	—	127,229
St. Peters.....	648,547	—	648,547
Tay.....	489,599	—	489,599
Trent.....	19,319,760	17,415	19,337,175
Welland.....	29,908,498	—1,210 <sup>2</sup>	29,907,288
Welland Ship Canal.....	50,772,093	11,960,465	62,732,558
Williamsburg	Farran's Point.....	877,091	877,091
	Galops.....	6,143,468	6,143,468
	Rapide Plat.....	2,159,881	2,159,881
	Williamsburg.....	1,334,552	1,334,552
Canals in general.....	34,967	—	34,967
Total.....	163,787,855	12,024,461	175,812,316

<sup>1</sup> The records relating to cost of construction by the Imperial Government were destroyed by fire in 1852 and the statistics are not included in this table. <sup>2</sup> Revenue.

**Appendix II.—Expenditures by the Dominion Department of Public Works in the Maritime Provinces from Confederation to March 31, 1925**

A statement herewith from the Chief Accountant's Branch of the Department of Public Works shows by provinces the expenditures on construction and repair and maintenance of public buildings since Confederation, also the expenditures on dredging and on construction and repairs of harbours, from Confederation to March 31st, 1925.

Of a total expenditure of \$172,414,033.38 on public buildings since Confederation, \$3,271,388.21 of which was not separable by provinces, there was expended in Nova Scotia \$5,579,356.89, in Prince Edward Island \$915,483.69, in New Brunswick \$6,516,074.22, or a total of \$13,010,914.80, or 7.55 per cent. Of the total expenditure for this purpose, Nova Scotia accounted for 3.24 per cent, Prince Edward Island for 0.53 per cent, and New Brunswick for 3.78 per cent. This percentage of expenditure was considerably smaller than the proportion of the Maritimes on a population basis.

On the other hand, out of \$190,255,557.99 shown by the statement to have been spent on harbours and rivers since Confederation, \$6,691,080.54 of which could not be allocated by provinces, there was spent in the Maritime Provinces a total of \$50,117,496.38, or 26.34 p.c. of the total. Of this sum \$18,041,521.86 or 9.48 per cent of the total, was expended in Nova Scotia, \$3,485,416.03 or 1.83 per cent in Prince Edward Island, and \$28,590,558.47, or 15.03 per cent, in New Brunswick.

In considering these percentages, it should be remembered that in 1871 the three Maritime Provinces contained 20.80 per cent of the total population and in 1921 only 11.38 per cent. A fair average for the 50 year period would perhaps be the 16.64 per cent of 1901, or approximately one-sixth of the total population.

Taking the two items of public buildings and harbours and rivers together, out of a grand total of \$362,669,591.37 expended since Confederation, the total for the Maritimes was \$63,128,411.18 or 17.4 per cent of the grand total.

STATEMENT SHOWING TOTAL AMOUNTS SPENT BY THE DEPARTMENT OF PUBLIC WORKS, IN EACH PROVINCE, FROM CONFEDERATION TO 31ST MARCH, 1925.

—	—	Construction and repairs	Maintenance	Total
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>Totals, Public Buildings—</b>				
Nova Scotia.....	—	3,721,087 35	1,858,269 54	5,579,356 89
Prince Edward Island.....	—	540,810 41	374,673 28	915,483 69
New Brunswick.....	—	4,750,063 23	1,766,010 99	6,516,074 22
Quebec.....	—	18,007,273 65	8,046,327 91	26,053,601 56
Ontario.....	—	63,277,677 65	34,749,635 35	98,027,313 00
Manitoba.....	—	5,801,679 15	2,376,688 98	8,178,368 13
Saskatchewan and Alberta.....	—	8,319,532 33	3,513,633 21	11,833,165 54
British Columbia.....	—	7,446,241 91	2,597,072 36	10,043,314 27
Yukon.....	—	485,291 88	1,510,675 99	1,995,967 87
Public Buildings Generally.....	—	1,685,403 33	1,585,984 88	3,271,388 21
	—	114,035,060 89	58,378,972 49	172,414,033 38
<b>Totals, Harbours and Rivers—</b>				
Nova Scotia.....	5,962,680 88	12,078,840 98	—	18,041,521 86
Prince Edward Island.....	1,326,023 90	2,159,392 15	—	3,485,416 05
New Brunswick.....	11,801,681 90	16,788,876 57	—	28,590,558 47
Quebec.....	10,377,479 59	32,347,622 23	—	42,725,101 82
Ontario.....	21,614,036 09	33,995,551 41	—	55,609,587 50
Manitoba.....	1,204,362 92	2,964,297 91	—	4,168,660 83
Saskatchewan and Alberta.....	150,263 55	675,795 00	—	826,058 55
British Columbia.....	8,750,169 39	21,042,865 98	—	29,793,035 37
Yukon.....	—	324,537 00	—	324,537 00
Harbours and Rivers Generally.....	155,114 82	6,535,965 72	—	6,691,080 54
	61,341,813 04	128,913,744 95	—	190,255,557 99
<b>Sundry Totals: (A)—</b>				
Dredging Plant.....	—	10,516,120 51	—	10,516,120 51
Slides and Booms.....	—	4,855,750 61	—	4,855,750 61
Roads and Bridges.....	—	5,076,587 07	—	5,076,587 07
Telegraph and Telephone Lines.....	—	20,339,201 38	—	20,339,201 38
Miscellaneous.....	—	15,699,189 04	—	15,699,189 04
War and demobilization.....	—	12,567,347 34	2,278,702 87	14,846,050 21
<b>Grand Total.....</b>	61,341,813 04	312,003,001 79	60,657,675 36	434,002,490 19

(A) Not apportionable by Provinces.

**Appendix III.—Credits claimed by the Maritime Provinces in compensation for non-participation in lands in the Prairie Provinces, Ontario and Quebec.**

The Maritime Provinces, in presenting certain claims to the Dominion Government, include three which concern the question of public lands. These have been stated as follows:

1. A credit as against the Dominion Government equivalent on a per capita basis of calculation to that extended to Manitoba, Saskatchewan and Alberta on account of school lands.

2. A credit as against the Dominion Government of such an amount as will fairly represent, on a per capita basis of calculation, the proprietary interest of the Maritimes in the Public Lands of Manitoba, Saskatchewan and Alberta, transferred to the Government of these Provinces.

3. A credit as against the Dominion Government as compensation for non-participation in the federal lands transferred to Quebec and Ontario under the legislation of 1888, 1898, and 1912; when these credits have been arbitrated and established, the interest thereon should be paid annually according to the methods followed with respect to the debt allowances to the several provinces at Confederation.

A brief statement on each of these demands is appended.

*Claim 1.*—The most readily available basis on which to establish the credits demanded is the annual payment of the Dominion Government to the three Prairie Provinces. These payments, as shown in the accompanying statement, are made up of (1) interest on principal money invested, (2) all other than principal money (i.e. revenue from leases, etc.) and (3) interest accrued on current account. Total payments to the three provinces during the year ended March 31, 1925, on account of school lands amounted to \$1,848,065. At the estimated population of 2,141,100 (June 1, 1925) these payments were made at the rate of \$0.86 per head. Payments at this per capita rate (taken for 1925 as the latest year available and for the three Prairie Provinces together) would have amounted in Prince Edward Island to \$75,078, in Nova Scotia to \$461,734 and in New Brunswick to \$346,838, a total to the three Maritime Provinces of \$883,650, as per the following statement:

*School Lands*

**PAYMENTS BY DOMINION GOVERNMENT TO THE THREE PRAIRIE PROVINCES  
DURING THE YEAR ENDED MARCH 31, 1925**

Manitoba—

Interest on Principal Money invested.....	\$ 287,125
All other than Principal Money.....	12,950
Interest on current account.....	392
 Total.....	 300,467

Saskatchewan—

Interest on Principal Money invested.....	658,325
All other than Principal Money.....	292,754
Interest on current account.....	10,475
 Total.....	 961,554

Alberta—

Interest on Principal Money invested.....	346,350
All other than Principal Money.....	231,992
Interest on current account.....	7,702
 Total.....	 586,044
 Grand Total.....	 \$1,848,065

Population (est.) of Manitoba, Saskatchewan and Alberta, 1925—2,141,100.

Payment per head, 1925—\$0.86.

Population (est.) of Nova Scotia, 1925—536,900.

Payment on same basis—\$461,734.

Population (est.) of Prince Edward Island, 1925—87,300.

Payment on same basis—\$75,078.

Population (est.) of New Brunswick, 1925—403,300.

Payment on same basis—\$346,838.

Total payments to three Maritime Provinces—\$883,650.

*Claim 2.*—To determine a credit which would represent the proprietary interest of the Maritime Provinces in the public lands of the Prairie Provinces, in the event of these lands being transferred to the provincial governments, several factors must be considered. An important one is a comparison between the expenditure made on Dominion lands in these provinces and the revenue received from their administration. These figures, as quoted from the statement by the Deputy Minister of the Interior, dated Sept. 30, 1918, were \$86,441,808 and \$46,914,172 respectively, showing a net excess of expenditure over revenue of \$39,527,636. This phenomenon is to be explained in part by the relatively small value of the lands at the time of settlement, the policy of free homesteads, and the high costs of surveying and general administration. The same conditions, moreover, which caused this situation in the past, are to be considered in a computation of the present or future value of lands still unsold, especially in the case of agricultural lands.

Certain areas of land, in Alberta particularly, form an exception to the general rule as illustrated by the above figures, in that they promise remunerative returns from mining leases or royalties, while a substantial income is now received from timber dues.

The three Prairie Provinces receive, as a part of their subsidy from the Dominion Government, certain payments "in lieu of land" or as compensation for the retention of lands within their boundaries by the Dominion Government. The present annual subsidy to each of the three provinces, based on their population as at the census of 1921, amounts to \$562,500. This subsidy, in the event of the lands being transferred to the provincial governments, would no doubt be discontinued.

If the receipts and expenditures of the Dominion Government on Dominion lands during recent years be taken as an indication of the value, from the standpoint of Government revenue, of these lands, it will be seen that during the fiscal years 1921 to 1925 Dominion Government expenditures on this account exceeded receipts in every year. This expenditure does not include the payments to the provinces "in lieu of land."

*Claim 3.*—The determination of what credit might be granted to the Maritime Provinces as compensation for non-participation in the federal lands granted to Ontario and Quebec at various times would seem to be a somewhat involved problem. The northern areas granted to the two provinces would no doubt be considered as belonging on the assets side of a balance sheet, but only on account of their potentialities, rather than from the point of view of revenues realized from their possession. Since no precise information respecting these territories is available, any computation of their value to the provinces of Ontario and Quebec or of compensation to be allotted to the Maritime Provinces for their non-participation in these or similar lands, would require much more detailed investigation than the question has heretofore received.



## CHAPTER VIII.—EDUCATION

Education, in the broader sense of the term, means the development of the latent powers of the individual, with the object of making him in the strictly literal sense a more valuable member of society. The individual may not, of course, in each and every instance exert his improved powers towards practical results, but in the mass he does so. Education therefore when applied to the masses is economically productive; what is spent on public general education is seed sown in the expectation of a harvest to be actually reaped.

In economic language, education is the means of securing that trained labour force which makes the chief difference between the productivity of the American and the Chinese population. At least three-fourths of the national income of the most progressive countries is due to the earning power of human beings, whether as hand workers or as organizers and captains of industry. The best and easiest way to augment that national dividend (which means the augmentation of general well-being and the reduction of poverty to a minimum), is through developing the personal powers of the people.

In many respects the educational policy of the Maritime Provinces and particularly of Nova Scotia has resembled that of Scotland\*, especially in its requirement that even the one-room school shall prepare its students for the university—so that “every recruit may have a marshal’s baton in his knapsack”. The query may suggest itself whether the type of education given has been too predominantly intellectual and professional, with the result of pushing its graduates out of their native province into wider spheres—whether educational effort should now be given a direction toward those occupations which would develop the latent resources of the Maritimes.

Because of the vitally important place of educational policy in the composition and the economy of society, the following sketch of the systems of the Maritime Provinces, (prepared in the Education Statistics Branch of the Bureau) is included as a contribution toward the consideration of their general situation. The historical development of education by provinces is given first in some detail; the concluding pages are devoted to certain broader comparisons which may elucidate the general policy that has been pursued up to the present.

### Nova Scotia

*Historical Sketch—General.*—The history of education in Nova Scotia falls into five fairly definite periods: (1) The period of private schools or church education. (2) The period of semi-private education during which the state assisted education with more or less precarious grants (1732 to 1811). The Society for the Propagation of the Gospel in Foreign Parts, an Anglican institution, was particularly active in promoting education during this second period. Education resembled that in England, the institutions being mainly “secondary”, i.e. schools taking in children at early ages (around 10 years) and giving them what is understood now as both elementary and secondary education. (3) The third period (1811-1864) began when a common school system was founded and machinery set up for its support by steady government grants and such local organizations for school purposes as the school section (1826). This period culminated in the appointment of a Superintendent of Education (1854) and the establishment of a normal school (1855). (4) The fourth period (1864-1893) began in 1864 when a free school system was established supported on the principle of compulsory property assessment and poll tax so that all contributed to its support, and not the parents of school children alone. During this period the high school was really an institution for the training of teachers or

\* Scotland, said Macaulay in his famous speech on education, used to be one of the poorest and most despised of countries. But when general education was provided in her parochial schools, “wherever the Scotchman went he carried his superiority with him”.

preparation for a university. The normal school was an academic institution, except that it trained only those looking forward to teaching. This period may be said to have culminated in 1893 when the normal school was made a purely professional and the high school a purely academic institution. (5) The fifth period from 1893 to the present, with a landmark bearing upon secondary education in 1908, has been noted for the adoption by the province of most of the modern activities in education, including the different methods of holding adolescents at school, industrial education, the care of the health of school children, and the special education of the weaker ones. The work of either elementary or secondary education may be taken wherever there is a teacher qualified to give it, and the secondary institutions are willing to take in such pupils at any point in their high school career.

The Free School Act of 1864 with subsequent minor changes placed the school system in its present form, so far as organization for its support was concerned. The cost of support was to come from three sources: (1) the provincial grant paid directly to the teacher and apportioned according to the certificate held—this grant was afterwards changed to a fixed sum; (2) the county grant raised by a poll tax and apportioned as follows: \$25.00 received by each section for each teacher engaged; the balance distributed on the basis of average attendance; (3) sectional property assessment. The three sources in 1866 amounted to \$136,821 government grant; \$55,462 county fund; and \$176,252 school section assessment; in 1925 the figures were respectively \$658,648, \$524,037 and \$2,522,255. It has been argued that the second mentioned form of support is the preferable one in that it enables the more prosperous to help in the support of poor communities.

Special advances in education with the date either of legislation or initiation may be listed as follows:

1. School for the deaf, 1851.
2. School for the blind, 1867.
3. College of agriculture, 1885.
4. Summer school of science, 1887.
5. School of art, 1887.
6. Training in English in night schools (about 1890).
7. School of horticulture (at Wolfville), merged later with the college of agriculture, 1894.
8. Experiment in consolidation, 1903.
9. Manual training in high schools (about 1894).
10. School of mines (before 1896).
11. Office of Director of Technical Education established, and a technical college founded, 1907.
12. Director of rural science appointed, 1912.

Compulsory education has been in force from an early date. In 1895, school sections were required under penalty to take a vote at annual meetings on the question of compulsory attendance; if the measure passed, trustees were required to compel attendance between the ages of 7 and 12 for 120 days during the year. There were already (in 1895) 411 sections which had adopted compulsory attendance. There was also an act by which children in cities and towns between 6 and 16 were required to attend full time with certain exceptions; by 1903 more than two-thirds of the sections in the province had adopted it. In 1917 every child of school age in an institution for the poor was required to attend public school regularly, his education being maintained by the municipality in which he had a settlement. In 1918, compulsory attendance age requirements in other than cities and towns were extended to 14 years of age, but still left to a vote of the ratepayers; the compulsory law in a section could be rescinded by a two-thirds majority. The present compulsory laws were enacted in 1921.\*

By 1907 a system of teachers' annuities was in force, which by amendments in 1910, 1912, 1914 and 1917 brought in inspectors, normal school teachers and the staffs of the schools for the blind and deaf.

*Universities and Colleges.*—In 1789 an act was passed incorporating King's College. The agitation which resulted from the dominant influence of the Anglican Church in higher education eventually led to the establishment in 1811 of grammar schools. One of these, Pictou Academy, founded on the plan of a Scottish university, was incorporated in 1816, but was given no degree conferring powers, though its students graduated by examination as Master of Arts of Glasgow university. Owing to a cessation of grants this academy was forced to function as a high school in 1832. In 1821 Dalhousie College was founded after the model of a Scottish university. In 1823, 1835 and 1885 attempts were made to consolidate Dalhousie and King's

\*For a summary of these laws see *Annual Survey of Education in Canada, 1925*, page VIII, issued by the Dominion Bureau of Statistics.

but without success. In 1838 owing to certain discrimination against the Baptists, the latter founded Acadia College at Wolfville as a separate institution. In 1845 Dalhousie was closed and functioned as a high school from 1849 to 1859. A Presbyterian College founded in affiliation with Pictou Academy originated in 1820 and eventually migrated to Halifax in 1860. In 1854 St. Francis Xavier College (Roman Catholic) was founded at Antigonish. Another Roman Catholic College, St. Mary's, was opened at Halifax in 1860. Mount Allison University, established by the Methodists in 1862 in New Brunswick just across the border, drew from Nova Scotia a provincial grant of \$2,400 up to 1881. Up to this year (1881) grants from the public treasury were made to all these colleges. As the University of Halifax, which was established by the legislature in 1876 after the fashion of London University (i.e. as an examining or degree conferring body only), had demonstrated its failure to accomplish the design of bringing all the degree conferring institutions together, and as certain of the older universities refused to give up their charters, the government in 1881 withdrew all grants, and the University of Halifax ceased work. College Ste. Anne (Acadian), was founded in 1890 and given university powers in 1892. The seminary of the Holy Heart (also Acadian), was founded in 1895 with degree conferring powers. Mount St. Vincent Academy was given degree conferring powers in 1924. At the present time there are eight degree conferring institutions in Nova Scotia. As there are three universities in New Brunswick and one in Prince Edward Island, the Maritime Provinces possess altogether eleven independent universities (King's having been recently amalgamated with Dalhousie) while there are only ten independent universities in all the rest of the Dominion.

### New Brunswick

*Historical Sketch.*—In New Brunswick the history of education may be divided into four periods: (1) the period of purely private instruction (up to 1784); (2) the period of semi-private, i.e. partly state aided education, the remaining support being given by churches, benevolent societies and individuals (1784 to 1802); (3) from the date at which local machinery was introduced and state grants became constant until the establishment of free schools (1802-1874); (4) the free school period (1874 to the present).

In the early days, the English Society for the Propagation of the Gospel in Foreign Parts contributed liberally here as in Nova Scotia. The New England Company (organized in England in 1649), also turned its attention to New Brunswick after the American Revolution, and established schools, chiefly for the education of the Indians, in six counties. One of these schools continued until 1826. The most influential society operating in New Brunswick was the National Society, founded in London in 1811. This Society adopted what was known as the Madras system (sometimes as the "Bell" system, after its originator),—a system of instruction in towns and other large schools by the older pupils under the direction of an usher, all being selected by the master of the school. New Brunswick reflects this method at the present day, being the only province making use of what is known as classroom assistants.

As in Nova Scotia, state aid in New Brunswick was first extended to secondary and higher education. In 1786 the Council set aside 2,000 acres of land in the vicinity of Fredericton to endow a provincial academy of arts and science, and in 1800 the academy was established as the College of New Brunswick, afterwards (1828) known as King's College, and since 1869 as the University of New Brunswick. This grant was increased from time to time until in 1829 it reached its present amount, viz.: \$8,844. Until 1845 the members of the college council were required to be members of the Church of England. Since 1891 this university has been closely connected with the public school system, through the provision that the chief inspector should be president of its Senate. In 1805 the first of a series of grammar schools was established at St. John. These schools, like the similar ones in Nova Scotia, admitted children around the age of ten and carried them through university matriculation, the system being the same as the secondary education known in England and Europe (and in a sense in Quebec), the difference between it and "secondary education" in other provinces being that the latter is a mere continuation of elementary school work to which qualified pupils from all classes and conditions of the population are admitted, while the former was not a continuation of elementary work but a system running parallel with three or four years of elementary work and having a tendency to exclude the poorer element. A number of scholarships each year enabled a few of the brightest poor pupils to partake of secondary education. In New Brunswick the grammar

school is still so called, but in other respects it corresponds to the county academy in Nova Scotia\*. They were placed under the control of the Board of Education in 1861; those at St. John and Fredericton, however, were exempted from the operation of the Act, and it was not till 1871 that provision was made that grammar schools should be free as well as other schools, and that the pupils of the common schools should be graded into them. By an Act of 1858, provision was made for one school in each parish of a higher grade than the ordinary common school. These were to be known as "Superior Schools". They still exist as the high schools free to all the qualified pupils of the parish in which they are situated.

An Act of 1802 provided certain grants for common schools, and an unsuccessful attempt was made to create a public common school system; at the same time common school education was being carried on by the societies already mentioned. In 1816 an act was passed providing for the appointment of town or parish school trustees with powers to assess the inhabitants, this power being withdrawn in 1818. Other acts were passed in 1823, 1829, 1833, 1837, 1840 and 1844, the schools then being managed by the Court of General Sessions of the Peace in each city. As a result of a report of a government committee, a Board of Education was formed and empowered to establish normal and model schools, to appoint two school inspectors for the province, to prescribe text books and provide for the classification of teachers. Normal and model schools were opened in Fredericton and St. John in 1847, and later one at Chatham. Boards of examiners were appointed on whose reports teachers were licensed and received an allowance from the government. Previously, under the Society for the Propagation of the Gospel, teachers were licensed by the Bishop of London. The first superintendent of education was appointed in 1852, as was also an inspector for each county. The districts were empowered to assess themselves for the support of schools by the Parish School Act. Finally, in 1871 an act was passed providing for the establishment of a free non-sectarian school system, which began operations in the following year, the cost to be borne by a continuation of the government grant to teachers, a county assessment and district assessment. This, it will be noticed, is the same as the method of support in Nova Scotia. For capital expenditure, trustees were allowed to issue debentures. The three forms of support in 1925 contributed to the expenditure approximately as follows:—Government grants, \$400,059; county funds, \$211,885; and district assessment, \$2,736,480.

Landmarks in the recent history of education in New Brunswick are as follows:—

	Year
Provision for the education of the blind (at the school for the blind in Halifax, N.S.).	1892
Provision for the education of the deaf (at the school for the deaf, Halifax, N.S.), a little later	
Grant for school libraries.....	1899
Manual training department in connection with the normal school.....	1900
Grant for manual training and domestic science in the schools.....	1902
Experiment in consolidation.....	1903
Free text books in schools.....	1906
Legislation empowering boards to employ medical officers (at district's own charge)	1912
Evening school for technical education opened at St. John.....	1912
Agricultural rural summer school at Woodstock.....	1913
Legislation entitling a board to provide agricultural instruction with school gardens in schools, also entitling a teacher qualified to teach such to additional government grant.....	1914
District empowered to provide special education for retarded pupils.....	1918
Director of vocational education appointed.....	1919

In 1917 the province reciprocated a similar act in Nova Scotia by admitting the 3rd, 2nd, 1st and the next higher class of Nova Scotia normal trained teachers to corresponding standing in New Brunswick for one year, providing they held the necessary Dominion physical training certificates, this temporary license to be made permanent on passing a satisfactory examination in School Law and Civics.

*University Education.*—Mention has already been made of the rise of the University of New Brunswick (founded in 1800, present charter 1860). Mount Allison University was founded in 1838 (present charter 1863) and St. Joseph's in 1864 (present charter 1898). Mount Allison still draws a large proportion of its students from Nova Scotia; in 1925 out of a total registration of 234 in regular courses 101 were from that province.

\*The grammar schools in Nova Scotia became the county academies which are high schools free to all the educationally qualified pupils of the county in which they are situated. Other high schools co-exist with these, situated in towns other than county towns, and are free only to the pupils of the municipalities in which they are situated.

### Prince Edward Island

Provision in the shape of a land grant was made for education in this Province in 1767. A national school was opened in Charlottetown in 1821. In 1825 the first Education Act was passed, authorizing the government to pay, for four years, one-sixth of the teachers' salaries and £50 to each of the three counties for masters of grammar schools. In 1837 the first Superintendent of Education was appointed, but from 1848 to 1853 the general superintendent was displaced by county superintendents\*. The Free Education Act was passed in 1853 and provided for the payment of almost the whole of the teachers' salaries from the provincial treasury. In 1856 a normal school was opened. In 1860 Prince of Wales College was established; it was opened to women and amalgamated with the normal school in 1879. In 1877 the Public School Act was passed organizing the system practically in its present form. The act provided for a Chief Superintendent of Education, together with a Board of Education to consist of members of the Executive, the principal of Prince of Wales College and the Chief Superintendent. The powers and duties of the board included the establishment of normal schools with model departments, the appointment of three school inspectors, the examination and licensing of school teachers, the prescribing of text books, etc. Sources of support were: (1) The Provincial Treasury, to pay teachers' salaries and general costs of administration; and (2) Local assessment to defray all the expenses of the school district other than teachers' salaries; trustees might raise loans not to extend over seven years to meet capital expenditure. In 1925 the amounts from the different sources of support were as follows: Government grant, \$285,102; district supplement, \$85,582; other expenses paid by district \$82,015. A compulsory section of the Act requires children between 8 and 13 to attend at least 12 weeks, 6 of which are to be consecutive. The school system is non-sectarian. The Board of Education is permitted to make grants for school libraries equal to one-half the sum raised by the district. Trustees are empowered to provide children in certain cases with text books.

An experiment in consolidation was made in 1903. In 1913 another consolidation was effected, and still another in 1916. A two weeks' course in agriculture was inaugurated by the Department of Agriculture in 1913 and a second course of two weeks in 1914. The grants under the Dominion Technical Education Act were extended to this province on the understanding that because of its special needs it might expend them on Agricultural Education.

### Comparison of education in the Maritime Provinces and elsewhere in the Dominion

*The Form and Purpose of Education.*—In form, the educational systems of the Maritime Provinces are closely similar to each other. The acting executive head is a "Superintendent" of Education, instead of a "Deputy Minister"; while the Department of Education is linked with the government not by being under a minister, as in most of the other provinces, but through a council representing members of the government. (It would seem that the "Chief Superintendent" pervades the system rather more in New Brunswick than in the other two provinces). The common or elementary school systems so far as subject matter and modes of support are concerned are practically the same in Nova Scotia and New Brunswick. New Brunswick has a unique feature in the classroom assistant. Both in New Brunswick and Prince Edward Island the normal school for the training of teachers is an academic institution, pupils being admitted to the normal school in New Brunswick directly from the elementary grades of rural schools and given their high school training in the normal school itself. In Nova Scotia there is a complete separation between academic training in the high schools and professional training in the normal school, although an additional year of academic training is still accepted in lieu of normal school training in qualifying for the lower classes of teachers' certificates. Quebec is the only other province in Canada which resembles the Maritimes, especially New Brunswick, in respect of teacher training. There is a vaguer line of demarcation between elementary and high school work in New Brunswick than in either of the other two provinces, especially Nova Scotia. In the rural schools in New Brunswick it is difficult to distinguish where elementary work ends and high school work begins; in Nova Scotia the provincial high school examinations and a definite division into grades effect a complete separation. In consequence New Brunswick appears to have the lowest proportion in high school grades of any province in Canada, while Nova Scotia appears to have the highest. The comparison is not valid, however,

\*Hence the title "Chief Superintendent" used at present.

since in the high school grades in New Brunswick the rural pupils are not properly represented. The same situation existed in Prince Edward Island as in New Brunswick until the province adopted a uniform grading following the Dominion Conference on Education Statistics in 1921. Before this time it would appear as if the Island had a negligible proportion in high school outside of Prince of Wales College; it is now seen to be one of the best in this respect. Nova Scotia has long emphasized the continuity of the school system through elementary and secondary work; this encourages pupils to go on to high school, regardless of the calling they intend to follow; in New Brunswick rural pupils are graded out of the common schools either into the normal school for teacher training or into university matriculation courses,—a handicap on pupils who intend neither to teach nor to go on to a university. Perhaps Nova Scotia may be said to encourage going on to high school work for the purpose of general education regardless of another goal more than any other province in Canada. This, no doubt, is due to an inherited love of education for education's sake, while remnants of the former system persist in New Brunswick. In Prince Edward Island, as in Nova Scotia, the rural schools teach some high school work where the teacher is qualified to offer it; in New Brunswick rural schools, the elementary work is supplemented with some latin and algebra in the last two grades, and probably few go further except those intending to teach or to go on to a university. All the other provinces of Canada, except Quebec, like Nova Scotia, offer every facility to extend general education regardless of future calling through high school work.

*Financial and other Problems of Support.*—Conditions in this respect in the three provinces do not differ materially from those of other provinces in so far as urban schools are concerned. The rural school presents the greatest difficulty and the greatest difference. In Prince Edward Island, where the country is thickly settled and the farmers are prosperous, the main difficulty is the general unwillingness to bear taxation; in this province the chief support of education is assumed by the government. In Nova Scotia and New Brunswick the rural ratepayers shoulder the greater part of the burden, but in most sections they are less prosperous. In Nova Scotia, though the system is excellent and the material trained at the normal schools also excellent, the rural schools cannot afford to pay the teacher graduates of the high and normal schools what they can receive elsewhere. Consequently in rural schools in Nova Scotia in 1925, out of 1,560 teachers, 435 were new teachers and 864 were new to section. This means that 1,299 out of the 1,560 schools had a new teacher in that year and only 261 had the same teacher as in the previous year. Out of the 1,560 teachers, 736 had one year or less of teaching experience; 1,010 had 2 years or less; 949 had what is called a "D" certificate, or a temporary or permissive certificate (being lower than "Third" class in other provinces); 458 had a "C" certificate or what would be considered third class in other provinces; so that 1,405 had a certificate of third class rank or lower. The average salary of teachers in rural centres was \$426 for females and \$482 for males, the males forming only a very small proportion. In Ontario rural public schools the average salary of males was \$1,168 and of females \$994. There is no such discrepancy in the cost of living between the two provinces, and it is easy to see why with a normal school turning out about 400 trained teachers a year there should be only 1,827 normal trained teachers out of 3,331 in Nova Scotia, and why practically all of these normal trained teachers should be in village or urban schools. In New Brunswick the situation is somewhat better. It is clear, however, that the financial situation is the one great obstacle to rural education in the three provinces, especially Nova Scotia. Consolidation has been tried unsuccessfully in the latter province. In New Brunswick a few of the schools which were consolidated are still in operation as consolidations, and seem to be doing good work, but there has been no growth. In Prince Edward Island the need for consolidation is not great and there is really no good reason why rural schools should not be in as favourable a position as urban schools. The three means of support, viz., government grants, county fund and district or section assessment in the other two provinces yield amounts to which the government contributes about the same proportion as in the other provinces of Canada, so that the ratepayers carry as great a share of the burden as elsewhere. The solution of the difficulty would seem to be larger units than the school section by means of which one board could levy taxes for several schools and apportion these according to the needs of each school as well as choose the teacher, arrange for consolidations, etc.

*Progressiveness.*—It is also clear from the historical sketch that each province is as fully awake to the necessity for the various modern improvements in education as the other provinces of Canada. Nova Scotia introduced such activities as technical education, agricultural educa-

Convention of the  
Workers' Educational Association  
at Oxford in 1907

Speech by MacTavish, a Portsmouth shipwright

I am not here as a suppliant for my class. I decline to sit at the rich man's gate praying for crumbs. I claim for my class the best that Oxford has to give, claim it as a right--wrongfully withheld--wrong not only to us but to Oxford. What is the true function of a university? Is it to train the nation's best men, or to sell its gifts to the rich? Instead of recruiting her students from the widest possible area, she has restricted her area of selection to the fortunate few. They come to her not for intellectual training, but for veneering. Not only are workpeople deprived of the right of access to that which belongs to no class or caste, but Oxford herself misses her true mission, while the nation and the race lose the services of its best men. I emphasize that point because I wish it to be remembered that workpeople could do more for Oxford than Oxford can do for workpeople. For, remember, democracy will realize itself, with or without the assistance of Oxford; but if Oxford continues to stand apart from the workpeople then she will ultimately be remembered, not for what she is, but for what she has been.

And now having made good my claim, or our claim, to her best services, what is it that workpeople want from Oxford? Let us be frank with Oxford in this matter, because unless she understands what we want she can do nothing for us. The economics which emanate from Oxford are well adapted to meet the requirements and stimulate the minds of those young gentlemen who frequent her colleges, and because they are reduced to a science of social conduct and industrial practice which has made them and keeps them comfortable. But you cannot expect people to enthuse over a science which promises them no more than a life of precarious toil. We want from Oxford a new science of national and international economics--a science that will teach us the true relationship between production and consumption; that will teach us the true economic relationship in which men ought to men, men to women --- a science based, not on the acquisitiveness of the individual, but on social utility. And here let me say that I believe that one of the reasons, if not the great reason, why our university extension lectures have not been successful is due to the fact that the average university extension lecturer is decidedly middle-class and upper-class in his outlook. The man in the street can see that the university extension enables the son of a workingman to escape from his class; but he does not see that it builds up that sense of human solidarity which is essential to the lifting of the class itself. We want Oxford to open her doors to the best of our people, and take them in. We want her to inspire them, not with the idea of getting on, but with the idea of social service. And finally let me say to young people: Strive to come to Oxford. To Oxford I say: Open wide your doors and take us in; we need you; you need us.

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tion, special classes, etc. quite early. Compulsory attendance at school is also well regulated. The machinery for education may be said to be in excellent shape, with good engineers to handle it, but with some lack of fuel.

*University Education.*—University education is handicapped by the multiplicity of degree conferring institutions. This may not be serious so far as general work in arts and pure science is concerned; it is noticeable that graduates in these faculties give as good account of themselves as those of any university in Canada in post graduate work. It is, however, a serious obstacle in the way of equipping a strong institution for applied science, research work and the professions where the training process requires expensive equipment.

\* \* \*

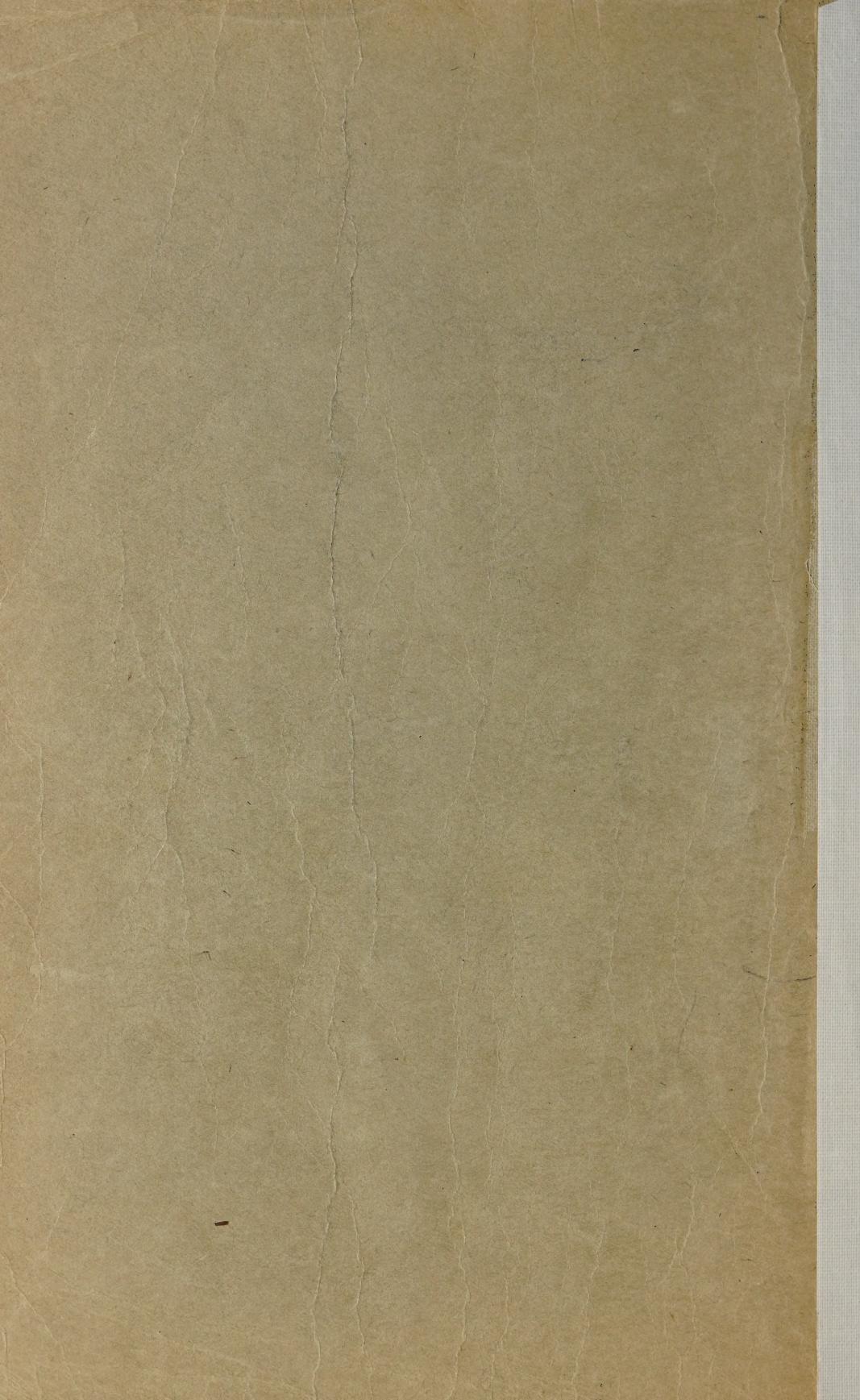
Summing up. Other phases of education and the manner in which they differ in the Maritime Provinces from the other provinces have been passed over in the preceding as unimportant. Emphasis has been laid on the all important feature of the methods and means of financing schools and the consequences upon the teaching material which the rural Maritimes, especially Nova Scotia can retain. On this point perhaps alone can education in Nova Scotia be said to come second to that of any province in Canada.

While omitting detailed discussion of comparative courses of studies and other subjects connected with education, it is necessary to draw attention to one further feature, viz., the rigid selection of the material passing through the high schools of the Maritimes, particularly in Nova Scotia and New Brunswick. This will explain away the *a priori* assumption that because rural schools are handicapped and at the same time undertake high school work those who complete their high school work at them must be badly equipped educationally. This may be refuted as follows:—

In Ontario in 1925 the successful candidates by subjects at the Lower School (grades IX and X) examinations averaged 93 p.c. of the total number of candidates; in the Middle School (grade XI) they averaged 73 p.c.; in the Upper School they averaged 80 p.c. It is clear that out of every 100 candidates for Lower School  $100 \times .93 \times .73 \times .80$  or 54 p.c. complete successfully the upper school in the minimum time. Thus the elimination amounts to 46 p.c.—which elimination is, of course, reduced by further examinations. Now in Nova Scotia 62 p.c. of the candidates for Grade IX were successful; 43 p.c. of the candidates for Grade X; 52 p.c. of those for Grade XI and 68 p.c. of those for Grade XII. Thus out of every 100 candidates for Grade IX,  $100 \times .62 \times .43 \times .52 \times .68$  or 9 p.c. are able to go straight through Grade XII. In other words, out of the 100 candidates for Grade IX, 91 p.c. are eliminated or forced to reattend and write over again before completing Grade XII. Thus the proportion going straight through in Ontario would compare with that in Nova Scotia roughly as 46 to 9 or five times as many. In New Brunswick, at the normal school entrance examinations, the proportion going straight through of every 100 candidates for third class is about 3 p.c. and the elimination 97 p.c. The other provinces in Canada show rather more failures than Ontario but few as compared with the two Maritime provinces. It is impossible to explain the elimination in the Maritimes as due to deficient mental calibre in the candidates; further, since the severity does not seem to be very much less in the case of the product of urban schools than in that of rural schools, it cannot be explained satisfactorily on the score of want of preparation: the urban schools of the Maritimes are admittedly not inferior to urban schools elsewhere. Further the logical manner in which the elimination proceeds in the Maritimes, being less in each successive year, shows that it is partly at least a weeding out of the poorer material so that only the best complete the work. The second year university and the upper class in the normal school select from the best 9 p.c. in Nova Scotia and the best 46 p.c. in Ontario. Assuming the mental calibre of the population in each province to be the same, it is clear that whatever superior preparation the 46 p.c. may have had they are not in a higher class than the best 9 p.c. in Nova Scotia or the best 3 p.c. in New Brunswick. The examination papers in Nova Scotia have been read by university professors who evidently weed out the weaker ones with great severity. Thus the universities and normal schools are likely to receive the very best material. The process is trying on the individual, no doubt, since he or she is either debarred from university or compelled to spend years in high school work until at last successful; but it should refute any argument advanced against the university material in these provinces.







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